Newfoundland and Labrador

The Economy
1990

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THE ECONOMY 1990

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FOREWORD

THE ECONOMY is an annual publication which has, in the past, been primarily intended to provide its readers with an analysis and review of economic performance in Newfoundland and Labrador during the previous year and an economic outlook for the current year. In addition to this primary function, the 1987 and 1988 editions of THE ECONOMY also provided a detailed analysis of the nature, structure and, in some cases, historical development of the Province's economy, particularly at the industry level. While this new approach was well received by the majority of our readers, we have found that for those readers interested primarily in performance and outlook information, this additional coverage made for a rather lengthy document. As well, the reference material contained in some sections does not change appreciably from one year to the next. We have decided therefore that this additional, more detailed material would be better suited to a reference document on the Newfoundland and Labrador economy, one which is separate from THE ECONOMY. This will permit THE ECONOMY to serve its original function as a performance review and outlook document while the reference document will provide a source of detailed information on the Provincial economy for those readers who find this type of material useful.

THE ECONOMY 1990 contains detailed information on the performance of the Provincial economy last year and the outlook for 1990. Readers who require a brief synopsis only are referred to the summaries at the beginning of the publication and also to Section III, *Overview of Economic Conditions*.

The research, writing and co-ordination of an annual publication such as this is always a complex process and while every attempt has been made to include only the most up-to-date information available, in some instances data contained in tables, diagrams and analyses will have been revised between the time of writing and the date of release. As well, data used in this publication may be inconsistent with data published earlier due to revisions.

THE ECONOMY 1990 has been considerably enhanced by the excellent suggestions and willing contributions of a number of individuals. In particular, the Economic Research and Analysis Division would like to thank: George Courage and the staff of the Newfoundland Statistics Agency; John Scott, Anne Marie Hann, Cabinet Secretariat; M. J. Woodman, Connie Hawkins, Canada Mortgage and Housing Corporation; Albert Williams, Treasury Board Secretariat; Nancy Smith, Royal LePage Real Estate Services Ltd.; Leo Browne, St. John's Port Corporation; Doug Burgess, Marine Atlantic; Ellison Butt, Harbour Master, Corner Brook; Derrick Payne, St. John's Real Estate Board; Cyril Colford, Department of Employment and Labour Relations; Tom Beckett, Department of Works, Services and Transportation; Mike Handrigan, Department of Fisheries; Bill Moyse, Canadian Saltfish Corporation; Robert Cowan, Newfoundland Dockyard Corporation; Robert Peters, Muhammad Nazir, Albert King, Philip McCarthy, Chee Yow and other staff of the Department of Forestry and Agriculture; Ted O'Keefe, Kevin Whittle, Canada-Newfoundland Offshore Petroleum Board; Eric Patey, Marystown Shipyard Ltd.; Glenn Mifflin, Christine Westcott, Newfoundland Processing Ltd.; Alan Vatcher, John Carson, Abitibi-Price Ltd.; Peter Kennedy and other staff of Intergovernmental Affairs Secretariat; Tony Burgess, Dave Hawkins, Jim Hinchey, Glenn Luther, Department of Mines and Energy; Stephen Goudie, Glenn Mitchell, John Roberts, Newfoundland and Labrador Hydro; Jeff Churchill, Newfoundland Light & Power Co. Ltd.; Roger Haynes, Marilyn Singleton, Andrea Peddle, Harry Bishop, Department of Development and Tourism; Sharon Porter, Department of Environment and Lands; Vincent Kennedy, Federal Department of Environment; David Williams, City of Corner Brook; Elizabeth Power, Town of Grand Falls; John Boland, Town of Gander; Kenneth Bartlett, City of Mount Pearl; Arthur Butler, Town of Conception Bay South; Wayne Purchase, Joe Sampson, City of St. John's. In addition, a number of individuals contributed to the development of the *Inventory of Major Projects* which appears in the final pages of this publication.

Special thanks is extended to Gary McManus of the Memorial University of Newfoundland Cartographic Laboratory (MUNCL); and to Walter Hudson and the staff of Printing and Micrographic Services Division for the cheerful and patient co-operation which they always demonstrate throughout the typesetting and printing process.

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1980 - 1989

NEWFOUNDLAND AND LABRADOR

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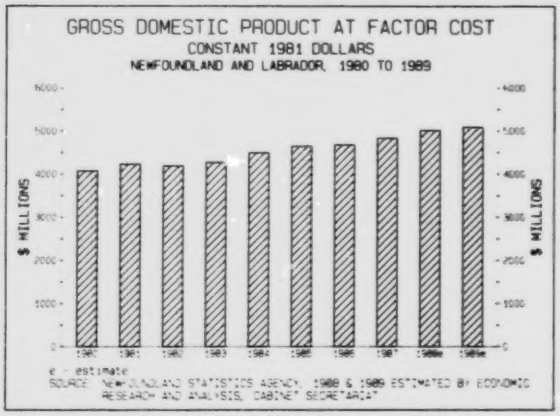
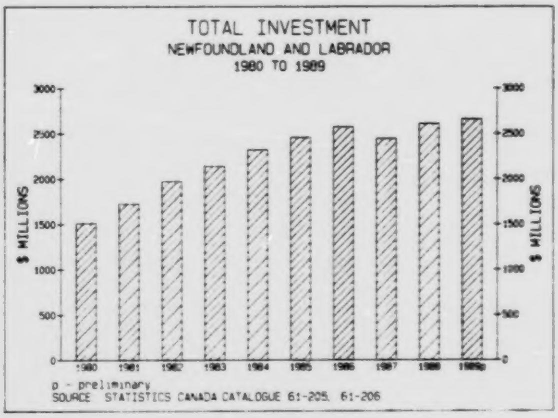

GROSS DOMESTIC PRODUCT AT FACTOR COST
CONSTANT 1981 DOLLARS
NEWFOUNDLAND AND LABRADOR, 1980 TO 1989

e - estimate
SOURCE: NEWFOUNDLAND STATISTICS AGENCY, 1988 & 1989 ESTIMATED BY ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

Diagram 2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NEWFOUNDLAND AND LABRADOR
1980 TO 1989

p - preliminary
SOURCE: STATISTICS CANADA CATALOGUE 61-205, 61-206

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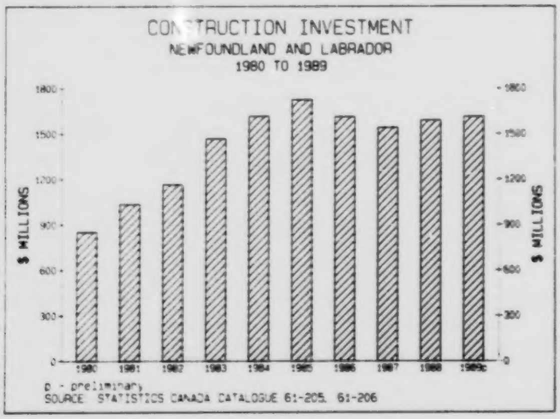
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p - preliminary
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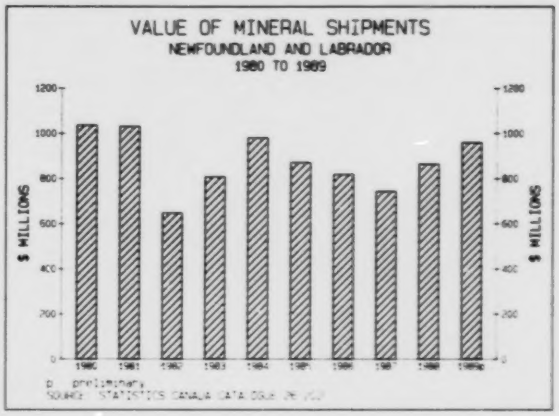
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p - preliminary
SOURCE: STATISTICS CANADA CATALOGUE 26-202

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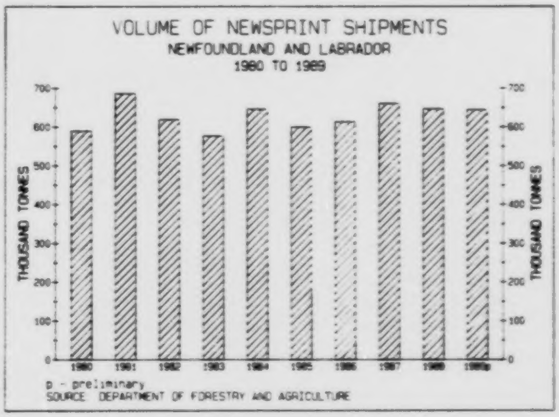
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p - preliminary
SOURCE: DEPARTMENT OF FORESTRY AND AGRICULTURE

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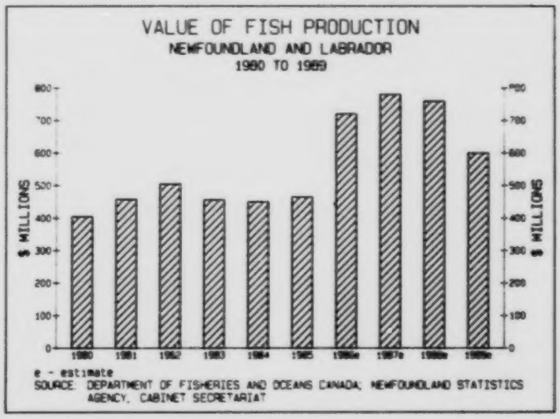
VALUE OF FISH PRODUCTION
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e - estimate
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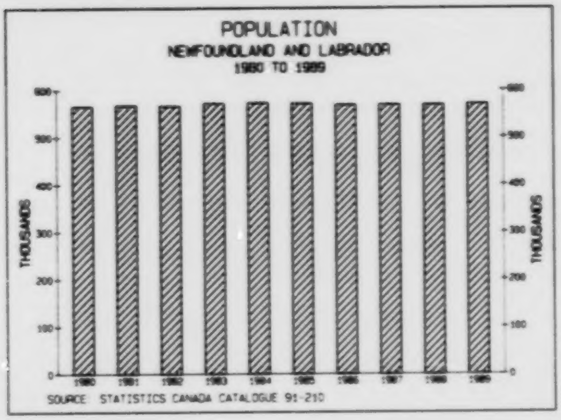
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SOURCE: STATISTICS CANADA CATALOGUE 91-210

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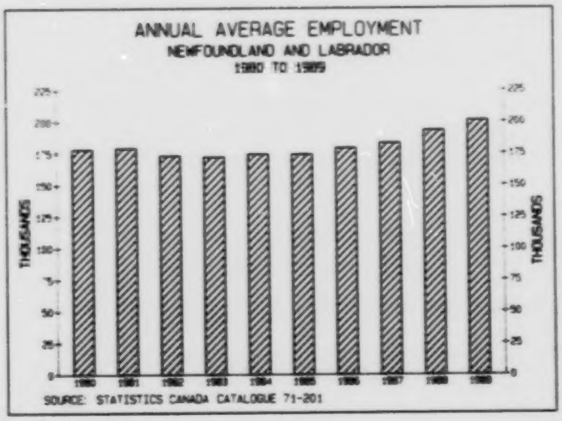
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SOURCE: STATISTICS CANADA CATALOGUE 71-201

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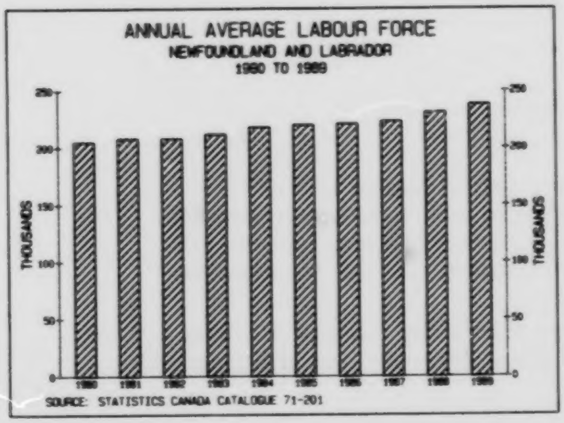
ANNUAL AVERAGE LABOUR FORCE
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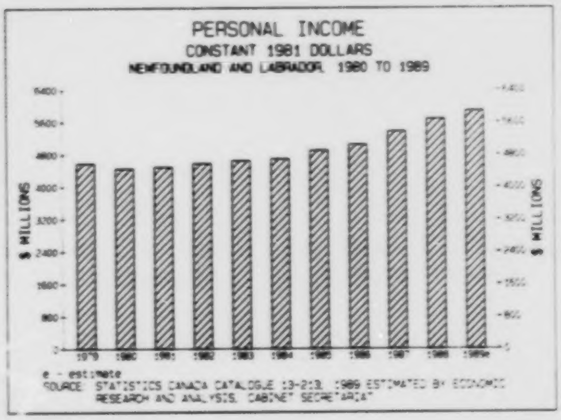
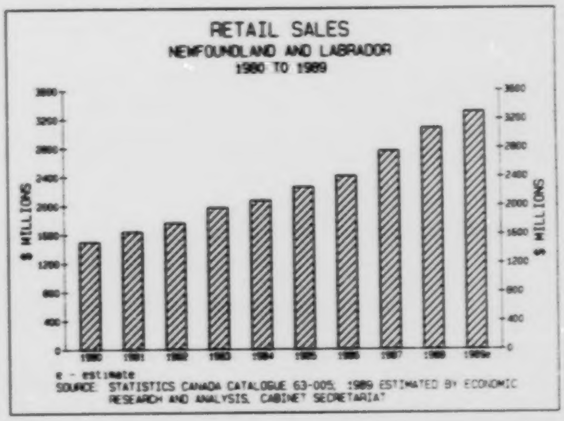
SOURCE: STATISTICS CANADA CATALOGUE 71-201

Diagram 10


PERSONAL INCOME
CONSTANT 1981 DOLLARS
NEWFOUNDLAND AND LABRADOR, 1980 TO 1989

e - estimate
SOURCE: STATISTICS CANADA CATALOGUE 13-213, 1989 ESTIMATED BY ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

Diagram 11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e - estimate
SOURCE: STATISTICS CANADA CATALOGUE 63-005, 1989 ESTIMATED BY ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

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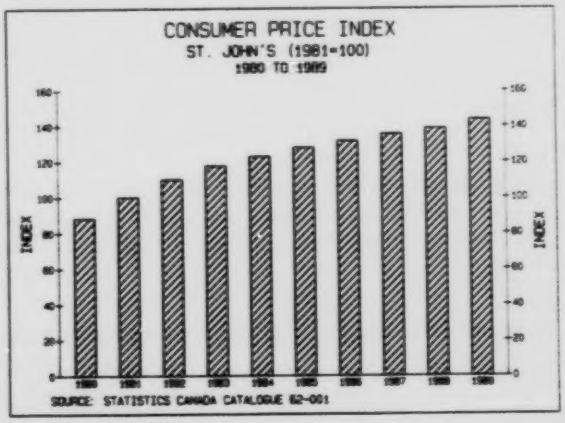

CONSUMER PRICE INDEX
ST. JOHN'S (1981=100)
1980 TO 1989

SOURCE: STATISTICS CANADA CATALOGUE 62-001

SUMMARY OF ECONOMIC PERFORMANCE DURING 1989

International and Canadian:

- All major industrial countries continued to experience real economic growth at an average of about 3.5 percent. Inflation and interest rates edged higher.
- In the United States real GNP grew by about 2.9 percent.
- In Canada real GDP grew by about 2.6 percent.
- Inflation in Canada rose during 1989 and interest rates have trended upwards; Canada's inflation rate was about 5.0 percent and the bank rate stood at 12.46 percent at the end of 1989.

Newfoundland and Labrador:

- 1989 marked the seventh consecutive year of real economic growth in the Province's economy. Real Gross Domestic Product is estimated to have grown by 1.4 percent while employment grew by more than four percent.
- Growth in employment outpaced labour force growth causing the unemployment rate to fall to its lowest level in eight years.
- Personal income grew by about 7.3 percent (3.6 percent in real terms). Wages and salaries, the largest component of personal income, increased by about 7.0 percent. Both higher levels of employment and higher average weekly earnings were responsible for the growth in labour income.
- Consumer spending was boosted by increased personal income and increased levels of tourism activity; the value of retail trade rose by about 7.4 percent.
- The inflation rate, which was 3.6 percent, remained below the national rate.
- The tourism industry continued to perform well with both the number of tourists and tourist related expenditures higher than levels achieved in 1988.
- The manufacturing industry can be divided into three major components, namely, fish products, pulp and paper products and other resource and non-resource manufacturing:
  - The manufacturing industry experienced difficulties in 1989 which negatively affected growth. Lower fish landings, primarily the result of reduced groundfish quotas, translated into lower output in the manufacturing industry.
  - The volume and value of newsprint shipments declined due to weak international markets.
  - Other types of manufacturing industries experienced a mixed performance; the Long Harbour phosphorus plant closed in August, workloads were reduced at the Marystown Shipyard, however, the Come By Chance oil refinery proceeded with development work necessary for full scale production levels.
- The iron ore industry recorded a solid performance as both the volume and value of shipments increased over 1988 levels.

- Mineral exploration expenditures, although lower than in 1988, remained at a relatively high level compared with earlier years.
- Oil and gas exploration activity fell from 1988.
- The residential real estate market in the St. John's area recorded a weaker performance during 1989 as the number of units sold through the Multiple Listing Service (MLS) fell by 8.3 percent.
- The electric power industry experienced growth as the total Provincial load increased by 1.8 percent.
- Employment in the construction industry was maintained at the levels achieved in 1988.
- Residential construction posted strong growth as housing starts rose by 11.6 percent to their highest level since 1980.

SUMMARY OF ECONOMIC OUTLOOK FOR 1990

International and Canadian:

- Real economic growth in the major industrial countries is expected to continue in 1990 though at a slower pace than in 1988 and 1989.
- GNP in the United States is expected to grow more slowly, at about 1.7 percent, due to weaker advances in exports and consumer spending.
- An eighth consecutive year of economic expansion is expected for Canada. Real GDP growth is forecast at about 1.3 percent.
- Inflation is expected to be 4.7 percent in Canada and interest rates are anticipated to be slightly lower on average.

Newfoundland and Labrador:

- Weakness in some of the goods producing industries is expected to constrain economic growth. Real GDP is expected to expand by 0.8 percent representing the eighth consecutive year of economic growth in the Province.
- Employment growth is expected to continue, though at a more modest pace than in 1989. Growth in the labour force may exceed growth in employment and this may cause the unemployment rate to rise slightly in 1990.
- The rate of inflation is forecast to be 4.0 percent, less than the national rate of 4.7 percent.
- Personal income is expected to grow by 6.5 percent which should spur growth in consumer spending. The value of retail trade is expected to increase by 5.2 percent.
- Housing starts are expected to decline in 1990, following robust growth for two consecutive years.
- The construction industry is expected to experience increased activity as a final agreement to develop the Hibernia oil field is anticipated by mid-year.
- The outlook for the real estate market in the St. John's area is positive with sales expected to exceed 1989 levels.
- The outlook for the manufacturing industry is for reduced activity during 1990:
    - The fish processing industry will be negatively affected by further groundfish quota reductions for 1990. However, the capelin fishery is forecast to record a solid performance.
    - Declines in newsprint production at the Grand Falls and Stephenville mills may be offset by increased production at Corner Brook depending on market conditions.
    - The output of other manufactured products will be constrained by the closure of the Long Harbour phosphorus plant and reduced workloads at the Marystown Shipyard, however, other operations are expected to perform well as local and international demand is sustained.

- The mining industry is expected to record another year of real growth.
- Activity in mineral exploration should continue to be brisk throughout 1990.
- Offshore oil and gas exploration levels are forecast to be higher.
- A decision on the development of the Terra Nova oil field may be forthcoming in 1990 which would provide additional stimulus to growth in investment.

I. INTERNATIONAL AND CANADIAN ECONOMIC ENVIRONMENTS

Changes in the international and Canadian economic environments have a significant bearing on the economic performance of Newfoundland and Labrador. In a highly integrated world economy, developments in both financial and product markets outside of the Province can have a direct impact on the Provincial economy through fluctuations in the demand for such products as fish and newsprint, as well as through fluctuations in interest and exchange rates.

All major industrialized countries continued to experience real economic growth in 1989, as indicated in Table I.1, marking the seventh consecutive year of economic expansion since the recession of 1982. Economic growth, however, was generally slower in 1989 than in 1988 while inflation was higher. The average real economic growth in the G-7 countries was estimated at 3.5 percent in 1989 compared to 4.5 percent in 1988. Average inflation, outlined in Table I.2, was estimated at 4.4 percent in 1989, up from 3.2 percent in 1988. Interest rates in these countries increased as central banks responded to higher inflation with more stringent monetary policies. The United States, however, began easing monetary policy in the latter part of 1989 in response to slower economic growth and slightly lower inflation.

TABLE I.1

REAL ECONOMIC GROWTH RATES IN THE MAJOR INDUSTRIALIZED (G-7) COUNTRIES

		Percent	
	1988	1989e	1990f
Canada	5.0	2.6	1.3
United States	4.4	2.9	1.7
Japan	5.7	4.8	4.4
United Kingdom	4.3	2.3	1.5
West Germany	3.7	4.3	3.2
France	3.5	3.8	2.8
Italy	3.9	3.5	3.0
G-7 Average	**4.5**	**3.5**	**2.6**

Notes: G-7 average is a weighted average of growth rates based on country shares of GDP/GNP.

e: estimate; f: forecast

Sources: Various, available on request.

TABLE I.2

CONSUMER PRICE INFLATION IN THE MAJOR INDUSTRIALIZED (G-7) COUNTRIES

	Percent		
	1988	1989e	1990f
Canada	4.1	5.0	4.7
United States	4.2	4.8	4.4
Japan	0.7	2.7	2.3
United Kingdom	4.9	7.8	6.0
West Germany	1.2	2.8	2.5
France	2.7	3.5	3.0
Italy	5.0	6.3	5.5
G-7 Average	**3.2**	**4.4**	**3.9**

Notes: G-7 average is a weighted average of consumer price inflation rates based on private consumption and exchange rates.

e: estimate; f: forecast

Sources: Various, available on request.

In the United States, the Province's most important export market, real GNP grew by an estimated 2.9 percent in 1989 compared to 4.4 percent in 1988. Both higher interest rates and an appreciation of the American dollar against most currencies (except the Canadian dollar) have contributed to slower economic growth. Higher interest rates have meant slower growth in overall consumer spending and business investment, and in some cases declines in expenditures. For example, housing starts declined about 7.0 percent and car sales declined about 13.0 percent in 1989. Slower growth in exports also contributed to the economic slowdown and was related to the appreciation of that Country's currency which made exports more expensive and caused foreigners to purchase fewer goods and services from the United States.

The United States employment figures have reflected the growth in the economy. Employment in the United States grew 2.2 percent to about 117.3 million, outpacing labour force growth and causing the unemployment rate to fall 0.2 percentage points to 5.3 percent during 1989.

Inflation in the United States was about 4.8 percent in 1989 compared to 4.2 percent in 1988. In response to inflation pressures in 1989, the Federal Reserve kept interest rates high. The prime interest rate in 1989 averaged about 10.79 percent compared to 9.4 percent in 1988. Signs of slower economic growth and slightly lower inflation in the second half of the year, however, led to an easing of monetary policy in the latter part of 1989.

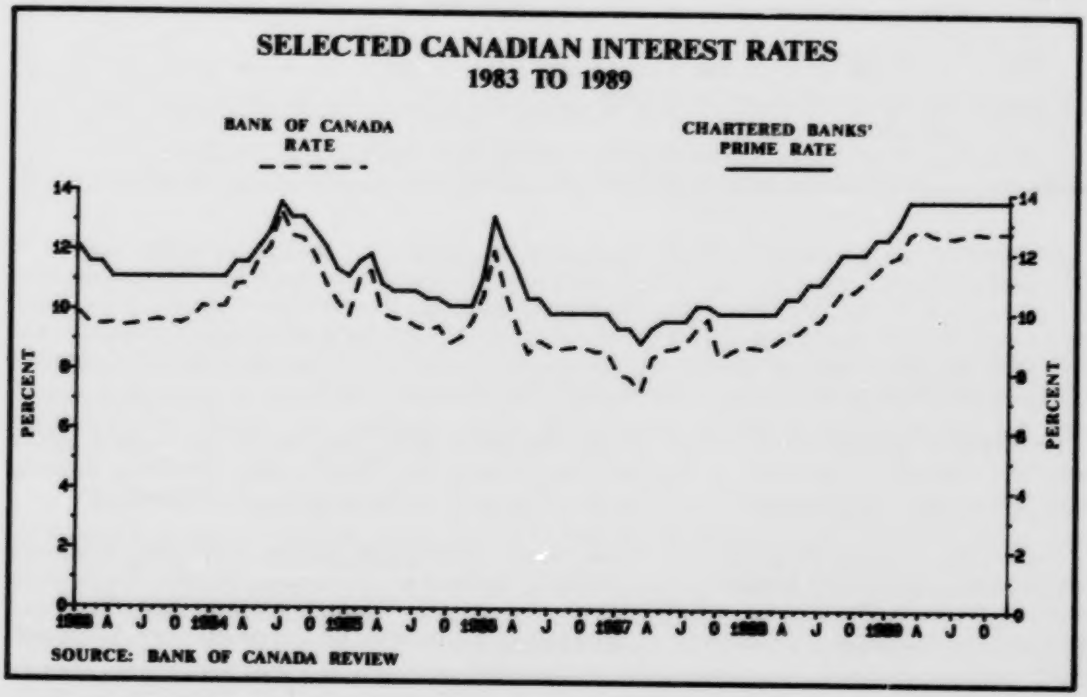
In Canada, real GDP growth slowed in 1989 to about 2.6 percent from 5.0 percent in 1988, marking the first time in seven years in which Canada's growth rate was below the G-7 average. Reduced growth has been largely attributed to higher interest rates, an appreciation of the Canadian dollar and slower economic growth in the United States. Higher interest rates constrained consumer spending and business investment. For example, housing starts in Canada declined about 3.0 percent to 215,382 from 222,562 in 1988. Slower consumption growth in Canada's largest export market, the United States, coupled with increased prices of Canadian exports into this and other markets due to the appreciation of the dollar, caused Canada's total exports to fall 0.4 percent in 1989.

Imports into Canada became less expensive with the appreciation of the dollar and, as a result, imports increased 6.7 percent in 1989. The resulting trade surplus of $4.7 billion in 1989 was less than half of the 1988 surplus. This poorer trade performance was highlighted with monthly trade deficits of $314 million and $91 million in October and December respectively, the first monthly trade deficits in 13 years.

Canada's inflation rate, as measured by the year-over-year change in the Consumer Price Index, was about 5.0 percent in 1989 compared to 4.1 percent in 1988. The increase in prices was partly due to the strong economy in Central Canada, as well as to increases in indirect tax rates. Inflationary pressure was lessened, however, by the appreciation of the Canadian dollar which lowered the prices of imports in terms of Canadian dollars. Excluding the more volatile food and energy prices, the Consumer Price Index increased by 5.4 percent compared to 4.8 percent in 1988. This rate of inflation, which excludes food and energy prices, is referred to as the core rate of inflation and is more indicative of underlying inflation trends. Inflation for various components of the Consumer Price Index ranged from 3.7 percent for food to 9.3 percent for tobacco and alcohol products.

The Bank of Canada continued to adhere to the view that price stability is most conducive to long term economic growth. In response to the risk of inflation resulting from a strong economy, the Bank of Canada has pursued a more restrictive monetary policy for more than two years with its goal of price stability (i.e., inflation near zero percent). This has pushed interest rates higher since early 1987 as illustrated in Diagram I.1. The interest rate rise was intended to slow the rate of economic expansion and produce an environment of price stability. The Bank of Canada rate increased from 11.17 percent at the end of 1988 to about 12.46 percent at the end of 1989 and the prime rate increased from 12.25 percent to 13.5 percent.

DIAGRAM I.1

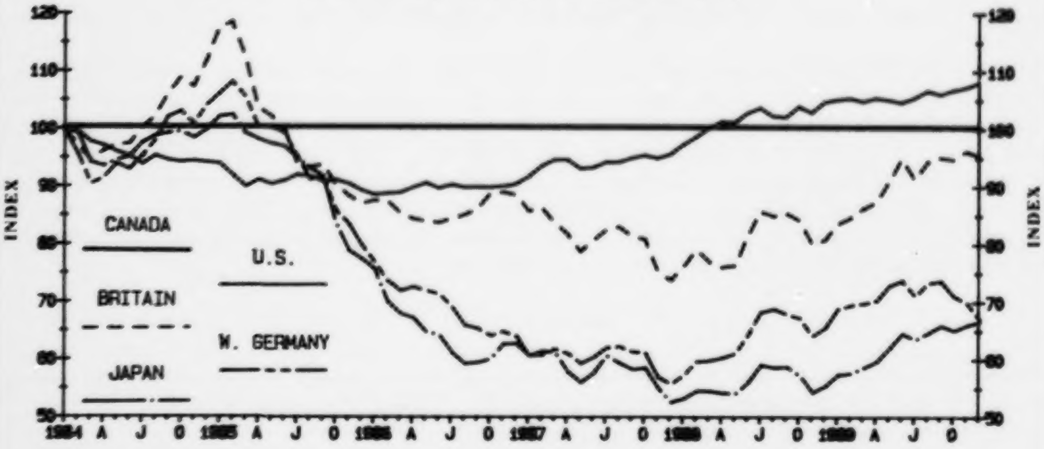


SELECTED CANADIAN INTEREST RATES
1983 TO 1989

SOURCE: BANK OF CANADA REVIEW

The Canadian dollar performed strongly on world currency markets in 1989, appreciating in value against all major currencies as illustrated in Diagram I.2. The Canadian dollar appreciated 3.2 percent against the American dollar, rising from US$0.836 at the end of 1988 to US$0.863 at the end of 1989. The dollar also appreciated 19.9 percent against the Japanese yen, 17.8 percent against the British pound and 2.1 percent against the West German mark. The Canadian dollar's appreciation is largely attributable to a tighter monetary policy and higher interest rates in Canada than abroad which attract short-term international capital flows into Canada.

DIAGRAM I.2



EXCHANGE VALUE OF THE CANADIAN DOLLAR
EXPRESSED IN FOREIGN CURRENCY UNITS
(INDEXED, JANUARY 1984 = 100)

NOTE: AN INDEX VALUE OF LESS THAN 100 INDICATES A DEPRECIATION OF THE CANADIAN DOLLAR RELATIVE TO JANUARY 1984

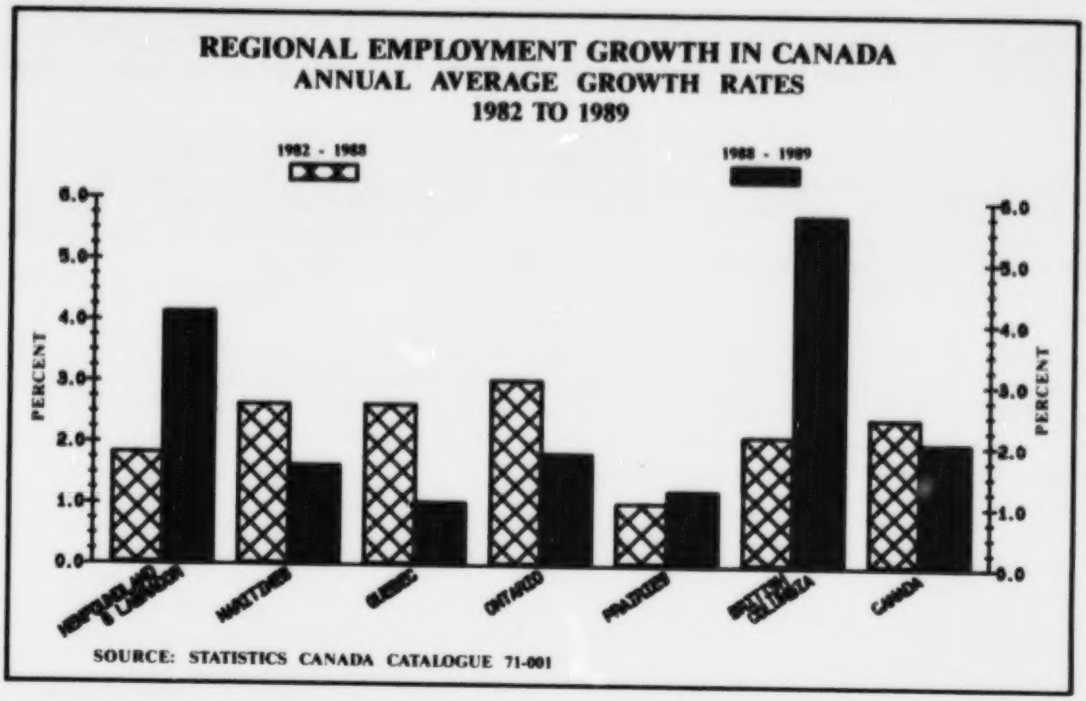
SOURCE: BANK OF CANADA REVIEW; ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

Employment in Canada grew by 2.0 percent to reach 12.5 million in 1989. Growth in employment outpaced growth in the labour force and as a result the unemployment rate declined to 7.5 percent, the lowest rate since 1981. The participation rate (the number of people in the labour force as a proportion of the population of labour force age) and the employment/population ratio (the number of people employed as a proportion of the population of labour force age) both attained their highest levels ever, averaging 67.0 and 62.0 percent respectively.

Employment growth of 4.1 percent in Newfoundland and Labrador was the second highest among the Canadian provinces, as illustrated in Diagram I.3. Employment growth by province ranged from a low of 1.0 percent in Quebec to a high of 5.7 percent in British Columbia.

Substantial regional disparities in employment opportunities persisted in 1989. While the unemployment rate in Newfoundland and Labrador declined to 15.8 percent in 1989, the Province continued to have the highest unemployment rate in the Country. Ontario had the lowest unemployment rate among the provinces with a rate of 5.1 percent, up marginally from 5.0 percent in 1988.

DIAGRAM I.3


REGIONAL EMPLOYMENT GROWTH IN CANADA
ANNUAL AVERAGE GROWTH RATES
1982 TO 1989

SOURCE: STATISTICS CANADA CATALOGUE 71-001

The major industrialized (G-7) countries are forecast to post slower economic growth in 1990 with average growth expected to be about 2.6 percent. Slower growth is expected to be accompanied by lower inflation in the G-7 countries; inflation is forecast to average 3.9 percent. As a result, most G-7 countries should experience lower interest rates in 1990 as central banks begin to ease monetary policy.

The United States is expected to experience another year of slower economic expansion in 1990 with real growth in GNP forecast at about 1.7 percent. Slower growth is expected to stem partly from slower spending by business and consumers. Industrial production, which is estimated to have grown 3.3 percent in 1989, is expected to grow only 1.2 percent in 1990. Housing starts, which decreased in 1989, are expected to decline a further 2.1 percent in 1990. Inflation in the United States is expected to fall to 4.4 percent due to slower economic growth in 1990. As a result, it is expected that United States monetary policy will continue to ease and interest rates will decrease in line with slower economic growth.

Canada is forecast to post slower economic growth of 1.3 percent in 1990. The growth slowdown is expected to stem partly from slower growth in spending by business and consumers. Consumption, which is estimated to have grown 3.3 percent in 1989, is forecast to grow only 0.4 percent in 1990. Housing starts are forecast to decline by about 10.0 percent in 1990 as a result of high interest rates, however, some of the downward pressure on housing markets may be alleviated if Canadian home buyers respond to the proposed 1991 implementation of the Goods and Services Tax by purchasing homes earlier than they had otherwise planned. Business investment growth is expected to decline from an estimated 10.5 percent in 1989 to 4.1 percent in 1990. Net export growth, however, is forecast to improve slightly in 1990 on the strength of a lower valued Canadian dollar.

Inflation in Canada is expected to decline to 4.7 percent in 1990 as a result of slower economic growth, however, there is some risk of additional inflationary pressure. In Ontario, for example, where labour markets are tight and many labour contract negotiations will take place in 1990, many analysts are concerned that collective bargaining strategies in response to the proposed 1991 Goods and Services Tax may lead to relatively high wage settlements resulting in additional upward pressure on inflation.

The Bank of Canada is expected to continue its fight against inflation in 1990. Signs of slower economic growth, however, may give the Bank of Canada cause to begin considering easing monetary policy. Most analysts expect interest rates to remain high in the early part of 1990 but to start easing later in the year in response to a slowing economy and lower inflation. The Canadian dollar, as a result, should depreciate in response to lower interest rates.

II. AN OVERVIEW OF THE NEWFOUNDLAND AND LABRADOR ECONOMY

The Newfoundland and Labrador economy may be best described as a primary resource-based economy. Today, as in the past, the harvesting of fish and timber along with the extraction of minerals comprise the cornerstone of the Province's economy.

The output of the goods producing sector accounted for 37.3 percent of total Gross Domestic Product in the Province during 1987. Table II.1 outlines the composition of the goods producing sector and the distribution of Gross Domestic Product (GDP) attributed to the Province's goods industries in 1987.

TABLE II.1

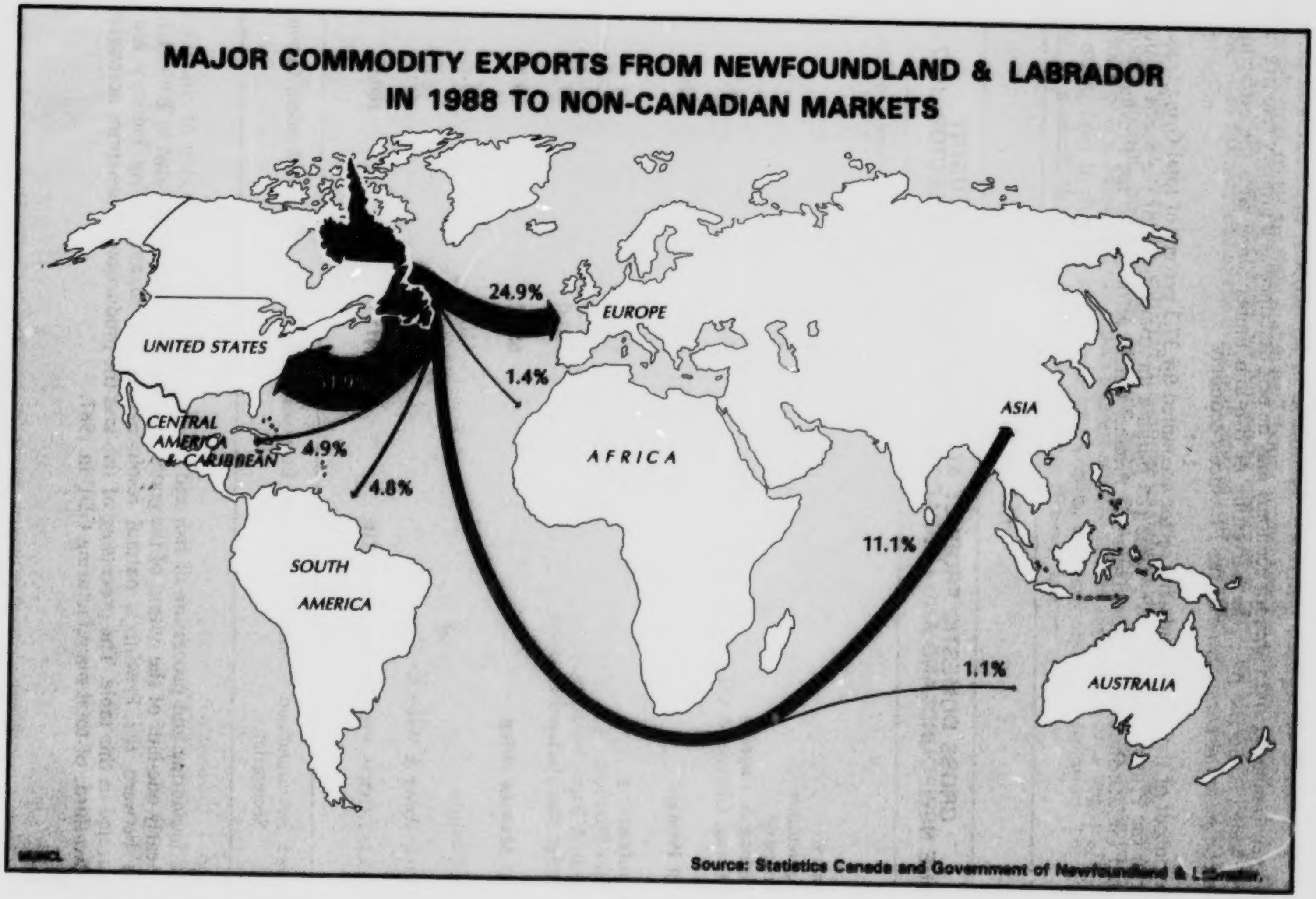
GROSS DOMESTIC PRODUCT AT FACTOR COST BY INDUSTRY
THE NEWFOUNDLAND AND LABRADOR GOODS PRODUCING SECTOR: 1987

	$ Millions	Percent of Total
Primary:		
Agriculture	22.0	0.9
Forestry	55.0	2.3
Fishing & Trapping	205.0	8.5
Mining, Quarries & Oil Wells	455.0	18.9
Total Primary	**737.0**	**30.6**
Manufacturing:		
Fish Products	330.0	13.7
Pulp & Paper Products	130.0	5.4
Other Manufactured Products	220.0	9.1
Total Manufacturing	**680.0**	**28.2**
Construction	610.0	25.3
Electric Power & Water Utilities	384.0	15.9
TOTAL GOODS PRODUCING SECTOR	**2,411.0**	**100.0**

Source: Newfoundland Statistics Agency and Economic Research and Analysis Division, Cabinet Secretariat.

The harvesting and processing of fish and timber along with the extraction of minerals gives rise to nearly one-half of the output of the goods producing sector, as illustrated in Table II.1. The linkages between the Province's natural resources and the manufacturing industry are also demonstrated in this table. The processing of fish and the production of newsprint accounted for about two-thirds of total manufacturing GDP in 1987.

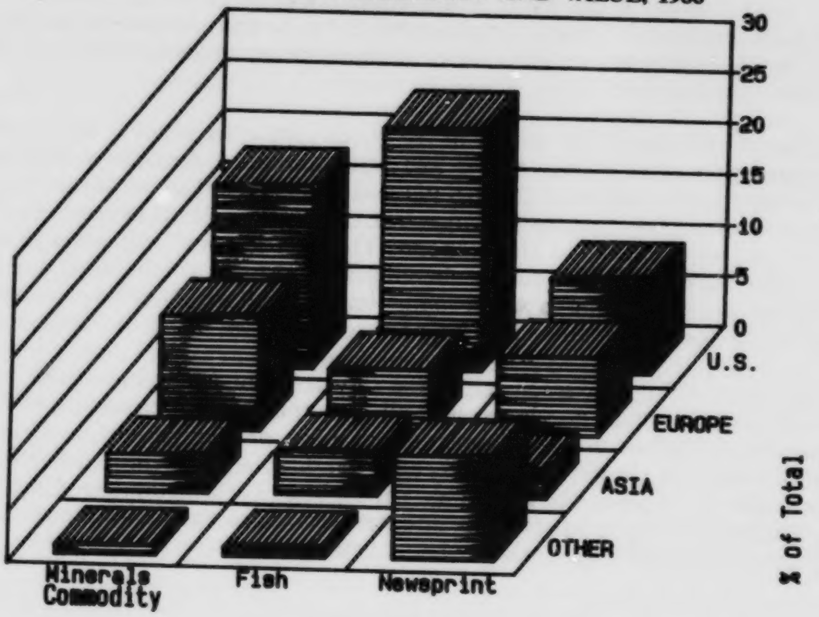
MAP II.1



MAJOR COMMODITY EXPORTS FROM NEWFOUNDLAND & LABRADOR IN 1988 TO NON-CANADIAN MARKETS

Source: Statistics Canada and Government of Newfoundland & Labrador.

DIAGRAM II.1



MAJOR EXPORT MARKETS
SELECTED RESOURCE-BASED PRODUCTS
NEWFOUNDLAND AND LABRADOR
BY COMMODITY AND VALUE, 1988

SOURCE: STATISTICS CANADA; GOVERNMENT OF NEWFOUNDLAND & LABRADOR

The Newfoundland and Labrador economy is linked to the economies of other countries as a result of its natural resource-based exports. Exports of minerals (mainly iron ore), fish products and newsprint have comprised a large proportion of the total value of Provincial exports over the years. The production of resource-based exports in the Province not only accounts for a sizeable share of export values, but also provides employment for a large number of people in Newfoundland and Labrador. For example, the production of fish products requires the skills of many individuals throughout the various stages of production, from fishermen and fish plant workers who harvest and process the product to trucking employees who transport the product to market. The total trade flows of mineral, fish and newsprint products from the Province in 1988 to non-Canadian markets are illustrated in Map II.1. While the relative importance of the markets highlighted in the map varies from year to year, the United States has been our most important customer for many years, followed by Europe and Asia. Diagram II.1 highlights these important export markets in 1988 and illustrates the proportion of exports shipped by destination. For example, about 34 percent of resource-based exports in 1988 were mineral products, whereas mineral products shipped to Asia accounted for about four percent of exports. In the same year, nearly 52 percent of exports of mineral, fish and newsprint products were shipped to markets in the United States. The most important export to the United States, of these three groups, was fish products accounting for about 24 percent of the total, followed by mineral products at about 18 percent and newsprint at close to 10 percent. The ties between the economy of Newfoundland and Labrador and foreign economies through our exports has caused the economic performance of the Province to rise and fall in unison with that of foreign economies.

Some of the products exported to non-Canadian markets in 1988 which are not contained in Diagram II.1 include food, chemical and petroleum products. Products such as these have historically accounted for only a small proportion of Provincial exports. In 1988, however, the value of petroleum products exported from the Province rose substantially due to the reactivation of the Come By Chance oil refinery in the fall of 1987. While the manufacturing of petroleum products in the Province is an important source of employment and produces a sizeable proportion of export value, it is not linked, at present, to the primary component of the goods producing sector as are the export products in Diagram II.1.

Approximately 51 percent of the output of the goods producing sector is accounted for by the agriculture, construction, and electric power and water utilities industries as well as the other manufactured products component of the manufacturing industry. The output of these industries is primarily for consumption within the Province. The construction industry meets the housing and capital infrastructure requirements of the economy. The electric power and water utilities provide electricity and water supplies. Goods such as beverages, foodstuffs, shipbuilding and concrete are provided by the non-resource manufacturing industries. Agriculture is not large in Newfoundland and Labrador but the food it produces is largely for consumption within the Province.

The proportion of GDP accounted for by the service sector in 1988 averaged approximately 61 percent for the 10 Canadian provinces, according to the Conference Board of Canada. The proportion, however, varied across the Country, from a low of 50.6 percent in Alberta to a high of 70.7 percent in Manitoba. In Newfoundland and Labrador, the proportion of GDP in the service sector fell about midway between the lowest and the highest. The distribution of monthly average employment, which consists of both full-year and part-year employment, within the service sector of the Province and Canada is illustrated in the table below.

TABLE II.2

DISTRIBUTION OF EMPLOYMENT BY SERVICE SECTOR INDUSTRY IN 1989

	Canada Percent of Total	Newfoundland and Labrador Percent of Total
Transportation, Communication & Other Utilities	10.8	12.2
Wholesale & Retail Trade	24.6	25.0
Finance, Insurance & Real Estate	8.3	4.7
Community, Business & Personal Services	46.7	45.3
Public Administration	9.6	12.8

Source: Statistics Canada catalogue 71-001; Economic Research and Analysis Division, Cabinet Secretariat.

An examination of the industries which comprise the service sector and some examples of the services and products provided by the firms within these industries are useful in understanding this essential component of the economy.

Table II.3 reveals that the types of services offered by the Transportation, Communication and Other Utilities industry include transportation by air, road and water. This industry is dominated by the transportation component and in 1989 it was estimated that approximately 18,000 persons were employed in this industry on an annual average basis. The size of the workforce in this industry is not surprising given the number of workers required to handle the large volume of goods that move to, from and within the Province by the various modes of transportation. In addition, many workers are required to facilitate the movement of people by air and land transport in a modern economy.

The Wholesale and Retail Trade industry is the second largest component of the service sector in terms of employment. Firms within this industry provide consumer goods such as automobiles, household furniture and appliances, food, clothing and many other products essential in Newfoundland and Labrador.

The performance of both the Transportation, Communication and Other Utilities industry and the Wholesale and Retail Trade industry are closely related to the level of economic activity in the goods producing sector. For example, an increase in the level of construction activity will cause an increase in the number of persons required to handle and ship structural steel, cement and concrete products and other construction related material and equipment. Furthermore, additional supplies will be required by construction firms and transport companies to support the increased level of activity. This increased demand for services by the goods sector, along with the additional income generated in both sectors, will stimulate an increase in the output of the Transportation, Communication and Other Utilities and the Wholesale and Retail Trade industries. These elements of the service sector tend to move in harmony with the goods producing sector.

TABLE II.3

SERVICE SECTOR INDUSTRIES AND THE SERVICES AND PRODUCTS PRODUCED

Industry Division	Illustrative Types of Services	1989 Annual Average Employment
Transportation, Communication & Other Utilities	Air, Railway, Road & Water Transportation, Broadcasting, Telephone, Electric Power	18,000
Wholesale & Retail Trade	Selling of Consumer Goods, Products, Food, Clothing, Appliances, Building Supplies, Automobiles, etc.	37,000
Finance, Insurance & Real Estate	Banking, Insurance & Real Estate Services	7,000
Community, Business & Personal Services	Lawyers, Accountants, Teachers, Doctors, Nurses, Social Workers, Hospital Workers	67,000
Public Administration	Municipal, Provincial & Federal Levels of Government	19,000

Source: Standard Industrial Classification (1980); Statistics Canada catalogue 71-001.

Examples of the types of services provided by the Community, Business and Personal Services and Public Administration industries are also provided in Table II.3. Increases in the output of these industries are less directly related to the performance of the goods producing sector. For example, the number of teachers and doctors employed by institutions within the Community, Business and Personal Service industry, or the number of police officers employed by agencies within Public Administration will not vary substantially from one year to the next since these services are required on an ongoing basis and are primarily related to demographic and social factors.

This overview of the structure of the Newfoundland and Labrador economy provides a context within which changes in performance from year to year can be assessed. An understanding of the current structure of the Provincial economy provides a useful framework for reviewing the performance of the economy in 1989 and the outlook for 1990.

III. OVERVIEW OF ECONOMIC CONDITIONS

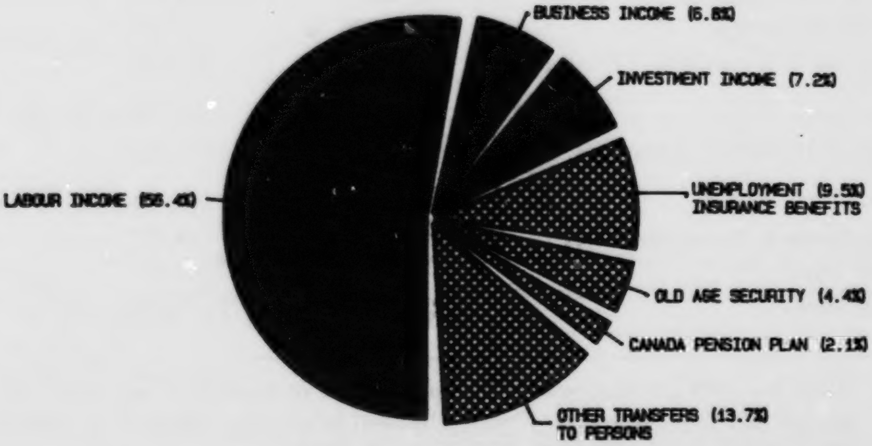
Newfoundland and Labrador experienced its seventh consecutive year of economic growth in 1989 as real Gross Domestic Product (GDP) increased by about 1.4 percent over the previous year and the level of employment grew by 4.1 percent. Economic growth was somewhat slower in 1989 than in the previous two years mainly because of weakness in key goods producing industries. In particular, performance in the fishing industry was affected by quota reductions in groundfish stocks while the newsprint industry was adversely affected by weak international market conditions. These and other export sectors of the economy also suffered from the appreciation of the Canadian dollar against other currencies which reduced the profitability of sales in foreign markets. The service sector, however, continued to perform well in 1989 as it benefited from higher consumer spending stimulated by gains in employment and personal income.

Growth in the Province's service producing industries provided a strong boost to employment in 1989, more than offsetting a slight decline in employment in the goods producing sector and leading to an increase of 8,000 person years in total employment over 1988. The level of employment averaged 201,000 in 1989, its highest level ever. Growth in employment exceeded growth in the labour force causing the unemployment rate to fall to 15.8 percent.

Personal income grew by about 7.3 percent in 1989 (3.6 percent in real terms). Wages and salaries, the largest component of personal income, were boosted by the strong gains in employment in 1989 and a rise in average weekly earnings. Average weekly earnings of $464 in the first ten months of 1989 were 5.1 percent higher than in the same period of 1988. Total wages and salaries over this period grew by 7.0 percent with wages and salaries in the service producing industries growing by 8.0 percent compared to growth of 4.2 percent in the goods producing industries. Growth in unemployment insurance benefits also contributed to the increase in personal income in 1989.

DIAGRAM III.1

COMPONENTS OF PERSONAL INCOME
NEWFOUNDLAND AND LABRADOR
1988



NOTE: DATA IS PRELIMINARY AND SUBJECT TO REVISION
SOURCE: INCOME AND EXPENDITURE ACCOUNTS DIVISION, STATISTICS CANADA

Unemployment insurance benefits, the largest component of transfers to persons, were 9.5 percent higher in the first ten months of 1989 than in the same period of the previous year. Contributing to this increase were a greater number of beneficiaries and higher insurable earnings due to an increase in maximum insurable earnings and an increase in average weekly earnings. The number of beneficiaries of unemployment insurance increased by 5.1 percent as the number of part-year jobs continued to grow even though full-year jobs were the dominant feature of employment growth in 1989. The increase in part-year jobs meant that more people were eligible for benefits in 1989.

Earned income, which includes labour income (wages, salaries and supplementary labour income), income from unincorporated business and income from investments, accounts for about 70 percent of personal income. This and other components of personal income in 1988, and the share that each comprised, are outlined in Diagram III.1.

Increased personal income, as well as increased tourism activity, boosted consumer spending in 1989. The value of retail trade increased by 7.3 percent (3.6 percent in real terms) in the first 11 months of 1989 compared to the same period in 1988. The sources of growth in retail sales by type of business are indicated in Table III.1. All ten retail trade groups experienced higher sales in 1989. Hardware stores displayed the strongest sales growth, due in large part to increased residential construction activity. Sales by motor vehicle dealers grew by only 2.2 percent, however, as the number of new motor vehicles sold declined by 4.7 percent. The decline in automobile sales in 1989 was consistent with the cyclical downturn observed elsewhere in the North American auto industry.

TABLE III.1

VALUE OF RETAIL TRADE BY TYPE OF BUSINESS NEWFOUNDLAND AND LABRADOR ($ thousands)

Type of Business	Jan. - Nov., 1988	Jan. - Nov., 1989	Growth Rate(%)
Food & Sundries Stores	759,212	829,474	9.3
Department Stores	132,035	136,962	3.7
General & Variety Stores	276,859	291,565	5.3
Motor Vehicle Dealers	539,926	551,874	2.2
Service Stations & Automotive Related Stores	380,178	401,457	5.6
Clothing Stores	116,540	122,156	4.8
Hardware & Household Accessories Stores	88,266	107,562	21.9
Drugstores	169,508	192,552	13.6
Sporting Goods & Accessories Stores	17,247	18,477	7.1
All Other Stores	250,042	278,112	11.2
Total All Stores	**2,729,813**	**2,930,191**	**7.3**

Note: Values for 1989 are preliminary. The data by type of business is aggregated from more detailed data contained in the source referenced below. The definitions of business types may therefore differ from those reported in the source.

Source: Statistics Canada catalogue 63-005.

Consumers in the Province also increased their spending on services, particularly in food and beverage establishments, as sales increased by 14.2 percent in the first ten months of 1989. This was largely due to a sharp increase of 23.5 percent in the receipts of restaurants and take-outs. Taverns witnessed more moderate growth in sales of 7.3 percent while sales of caterers declined by 17.7 percent. The overall increase in personal consumption expenditures in 1989 contributed to the increased activity in Trade (Retail and Wholesale) and Services (Community, Business and Personal) industries during the year.

TABLE III.2

INTENDED INVESTMENT EXPENDITURES NEWFOUNDLAND AND LABRADOR, 1989 ($ millions)

Expenditures	Construction	Machinery & Equipment	Total
Capital Expenditures	**1,370.3** (0.6%)	**672.7** (4.3%)	**2,043.0** (1.8%)
Primary Industries and Construction Industry	228.0 (-32.1%)	118.2 (28.1%)	346.2 (-19.1%)
Food and Beverage Manufacturing	2.9 (-76.0%)	19.0 (-51.4%)	21.9 (-57.2%)
Other Manufacturing	21.7 (-16.5%)	73.7 (-31.1%)	95.4 (-28.3%)
Transportation, Communication and Other Utilities	116.0 (3.8%)	239.8 (9.2%)	355.8 (7.4%)
Trade, Finance and Commercial Services	65.8 (-12.1%)	150.9 (16.0%)	216.7 (5.7%)
Institutions and Government Departments	415.3 (24.6%)	71.1 (25.4%)	486.4 (24.7%)
Housing	520.6 (11.1%)	n.a.	520.6 (11.1%)
Repair Expenditures	**242.2** (6.8%)	**375.9** (-0.8%)	**618.1** (2.0%)
Total Capital and Repair Expenditure	**1,612.5** (1.5%)	**1,048.6** (2.4%)	**2,661.1** (1.8%)

Notes: Figures in parentheses refer to change from 1988. Values for 1988 are preliminary actual while those for 1989 are revised intentions.

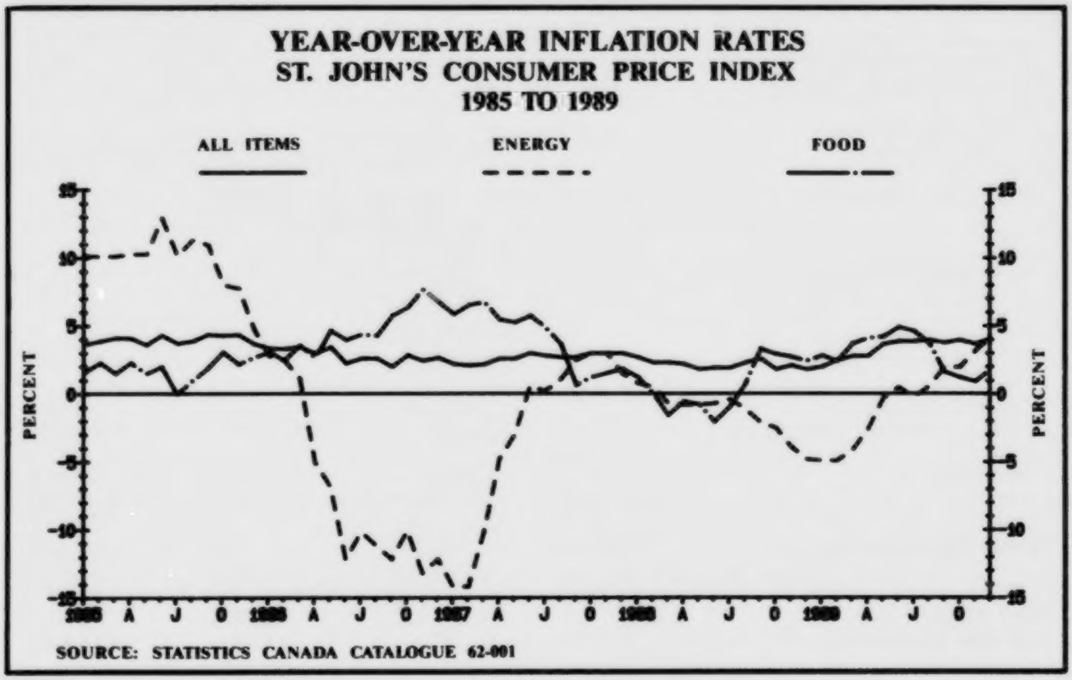
n.a.: Not applicable

Source: Statistics Canada catalogue 61-205; Economic Research and Analysis Division, Cabinet Secretariat.

Investment in Newfoundland and Labrador was higher in 1989 than in the previous year. Total investment increased by 1.8 percent to $2.7 billion in 1989 according to a survey of investment intentions carried out by Statistics Canada last year. The survey was conducted around mid-1989 and thus reflects the spending intentions of business, government and individuals at that time. Increases in capital expenditures in the housing and service producing industries were more than sufficient to offset a decline in investment in the goods producing industries as indicated in Table III.2.

The rate of inflation in the Province, as measured by the St. John's Consumer Price Index, was 3.6 percent in 1989. This was the highest inflation rate in the Province since 1985 but the rate remained well below the national rate for the fourth consecutive year. The groups within the index which recorded the largest price increases in 1989 were tobacco products; education; reading materials; transportation; and health care. The overall rate of inflation was moderated, however, by lower energy prices and only a small increase in housing costs. Food and energy prices are among the most variable components of the Consumer Price Index as illustrated in Diagram III.2. Excluding food and energy, the consumer price index increased by 4.3 percent in 1989.

DIAGRAM III.2



YEAR-OVER-YEAR INFLATION RATES
ST. JOHN'S CONSUMER PRICE INDEX
1985 TO 1989

SOURCE: STATISTICS CANADA CATALOGUE 62-001

The outlook for the Provincial economy in 1990 is for continued growth, albeit at a slower rate than in recent years as real GDP is expected to grow by about 0.8 percent. This is in keeping with economic trends elsewhere as a slowdown in economic growth is expected in most of the major industrialized countries. While this slowdown would have some negative impact on growth prospects for the Province's exports, the slowdown in Provincial economic growth in 1990 is primarily related to the problems facing the fishing and newsprint industries. Reduced quotas for Northern Cod and other key groundfish stocks will curtail production in the fishing industry in 1990. To some extent this is expected to be offset by higher fish prices in the United States market due to lower fish supplies as well as an expected depreciation of the Canadian dollar against foreign currencies. The Province's newsprint industry, which would also be aided by any depreciation of the Canadian dollar, is expected to face an over-supplied newsprint market and further downward pressure on prices this year. Also, the rationalization of the Grand Falls mill in March will lower output from that mill. The outlook for other goods producing industries is more positive. The mining industry is expected to perform well as demand for iron ore is expected to remain firm and exploration activity, particularly for offshore oil, is expected to increase. The construction industry is also expected to experience increased activity in 1990 as a final agreement to develop the Hibernia oil field is anticipated by mid-year followed by a start of construction activity in the second half of the year.

While real GDP in the goods producing industries is expected to decline in 1990, this should be more than offset by expansion of the Province's service producing industries. Expansion of these industries will be driven largely by growth in consumer spending. Increased tourism activity is also expected and this would favour many businesses in the Trade (Wholesale and Retail) and Services (Community, Business and Personal) industries.

Annual average employment is expected to increase by only about 1,000 in 1990 reflecting slower growth in the production of goods and services in the Newfoundland economy. Should the labour force expand by about 3,000 person years as expected, the unemployment rate would average 16.0 percent, a slight increase from the previous year but lower than the unemployment rates recorded throughout most of the 1980s.

An increase in average earnings per worker, as well as higher employment, is expected to generate growth in labour income in 1990 and, as a result, personal income is expected to grow by 6.5 percent during the year. Since personal income is expected to expand more slowly than in 1989, however, consumer spending is also expected to register slower growth. Other factors slowing the rate of increase in consumer spending include the uncertainty of future employment prospects facing many workers in the Province, particularly in the fishing industry, and the likelihood that sales of new motor vehicles will remain in a cyclical downturn, as is expected in the rest of North America. Offsetting these negative influences, however, is an anticipated increase in tourism expenditures in the Province, a decrease in interest rates later in 1990 and preemptive spending by consumers trying to avoid the Goods and Services Tax (GST) which the Federal Government plans to implement on January 1, 1991. Overall, the value of retail sales is expected to grow by 5.2 percent in 1990. Given an inflation rate which is expected to be 4.0 percent, this should result in a real increase in retail sales of about 1.2 percent.

In summary, the forecast for 1990 is one of slower growth in economic activity due to problems facing the fishing and forest industries. While the possibility of a recession cannot be ruled out in 1990, the risk should be small since economic growth in the Province's key trading partners is expected to continue, an agreement to develop Hibernia should be finalized around mid-year, and growth in the service sector is expected to cushion the Province's economy from weaknesses in some goods producing industries.

IV. AGRICULTURE

The agricultural industry accounts for less than one percent of Gross Domestic Product (GDP) in the goods producing sector and less than one half of one percent of total GDP. The industry, however, is important to rural areas of the Province and it reduces the Province's overall dependence on certain imported foods. The output of this industry is mainly consumed domestically although some agricultural products, such as blueberries and furs, are exported to markets outside the Province. Activities in the primary agriculture industry include the production of vegetables and other crops, as well as livestock and livestock products such as eggs and milk. Secondary activities include the production of products such as homogenized milk, processed meat products and ice cream. Primary and secondary agriculture together employ approximately 1,600 persons on a monthly average basis. Much of the primary employment is seasonal in nature.

TABLE IV.1

FARM CASH RECEIPTS, 1988 AND 1989
NEWFOUNDLAND AND LABRADOR,
($ thousands)

Livestock & Products	1988r	1989p	% Change
Cattle & Calves	1,940	1,959	1.0
Sheep & Lambs	190	213	12.1
Poultry	12,035	13,456	11.8
Eggs	9,647	10,440	8.2
Other Livestock & Products(1)	20,141	21,675	7.6
Total Livestock & Products	**43,953**	**47,743**	**8.6**
Crops Produced			
Potatoes	847	1,016	20.0
Other Vegetables	2,997	3,232	7.8
Fruit	806	794	-1.5
Floriculture, Nursery & Other	4,001	4,193	4.8
Crop Insurance Payments	22	10	-54.5
Total Crops	**8,673**	**9,245**	**6.6**
Other Receipts & Supplementary Payments	2,106	2,136	1.4
TOTAL CASH RECEIPTS	**54,732**	**59,125(2)**	**8.0**

Notes: r - revised; p - preliminary

(1) Includes dairy products and hogs.

(2) Total does not add due to independent rounding.

Source: Policy Branch, Agriculture Canada.

Farm cash receipts are divided into two main categories; livestock and related products, which traditionally account for the largest proportion of farm cash receipts; and crops, as outlined in Table IV.1. Approximately 80.7 percent of total cash receipts in 1989 was generated by livestock and livestock products while 15.6 percent was accounted for by crops. The remaining 3.6 percent was derived primarily from sources such as the sale of forest and maple products and from payments under the Provincial income stabilization program. Total farm cash receipts increased by 8.0 percent to $59.1 million in 1989 due largely to increases in the livestock and related products sector.

Receipts from livestock and livestock products increased by 8.6 percent in 1989 compared to 1988 and accounted for over 86.3 percent of the improvement in total farm cash receipts. The largest components found in this category are "other livestock and products", poultry and eggs. Earnings from "other livestock and products", which primarily consists of dairy products, hogs and fur farming, rose by 7.6 percent in 1989. Increased revenues from the sale of dairy products were more than sufficient to offset lower prices for hogs and fur products and a decline in hog production. Poultry receipts of the 20 broiler producers in the Province rose by 11.8 percent compared to 1988 as a result of increased production and prices. The value of egg sales by the 31 Provincial egg producers increased by 8.2 percent.

Total crop receipts rose by 6.6 percent during 1989. The largest proportion of crop receipts are derived from floriculture, nursery and other products, and vegetables other than potatoes; increases in sales of these commodities accounted for 74.7 percent of the increase in total crop receipts. Receipts from floriculture, nursery and other products increased by 4.8 percent during the year. Major floriculture and nursery products such as bedding plants, potted plants, vegetable transplants and fresh lettuces, are produced for sale within the Province by 48 floriculture and nursery operators. Other products in this category include field crops such as savory which is sold both in local and export markets. Receipts for "other vegetables", which consists mainly of turnip and cabbage, increased by 7.8 percent in 1989. Other field crops produced in the Province include potatoes and fruit such as strawberries and blueberries. Potato receipts increased by 20 percent in 1989 due to a return to normal levels of production and higher prices: potato receipts were down in 1988 due to a lower marketable yield. Fruit receipts decreased by 1.5 percent mainly as a result of lower prices. Farm cash receipts do not fully reflect the importance of fruit production in the Province since it accounts for only the value of cultivated products but excludes the harvest of blueberries and other small fruits not grown on farms. For example, in 1989 about 2.6 million pounds of blueberries and partridgeberries were harvested with an approximate equivalent farm value of $2.2 million.

Farm net income, the difference between revenues and expenses, is a good indicator of Provincial farmers' income. Preliminary estimates indicate that realized net farm income for 1989 increased by 22.9 percent to $13.6 million. Total operating expenses after rebates and depreciation increased by 4.2 percent from the previous year. Those items contributing most to the increase in expenses were heating fuel, fertilizer and lime, wages for labour, feed and interest payments. These items accounted for approximately 96 percent of the increase in total expenses.

Efforts to enhance the agriculture industry in the Province in recent years have been supported by both the Federal and Provincial governments and two agreements are now in place to help develop the industry. The five year Canada-Newfoundland Agri-Food Development Subsidiary Agreement, signed in June 1988, committed $8 million to promote the growth of a viable agri-food industry in the Province through increases in productive efficiency and enhanced marketing programs. It is estimated that at the end of March 1990 approximately 47 percent of the $8 million committed under this agreement will have been spent. Allocations for the 1990/91 fiscal year are estimated at $1.2 million. The Canada-Newfoundland Subsidiary Agreement on a Livestock Feed Initiative, signed in March 1987, committed $4.8 million over a four year period to develop the Newfoundland livestock feed sector by increasing the quantity and quality of livestock feed produced in the Province. It is estimated that approximately 77 percent of funding committed under this agreement will have been spent by the end of March 1990.

The outlook for the agriculture industry is positive as total farm net income is expected to rise by between two and four percent. Gains in net income will be realized from improvements in the crop sector while the livestock sector is expected to remain stable. Crop receipts are expected to increase due mainly to higher berry prices, increased strawberry production and continued growth in the floriculture and nursery sector. Reductions in egg producers' quotas, lower egg and poultry prices and continued downward pressure on fur prices will be offset somewhat by anticipated higher production and farm gate prices in the dairy sector. This should result in stable livestock receipts. Farm expenses are also forecast to remain stable. A reduction in producer levies, which are charges administered by various marketing boards, and lower expenditures on feed are expected to be countered by higher fuel, labour and equipment repair costs. On balance, gains in crop receipts coupled with stability in overall livestock revenues should be sufficient to spur modest growth in total farm net income.

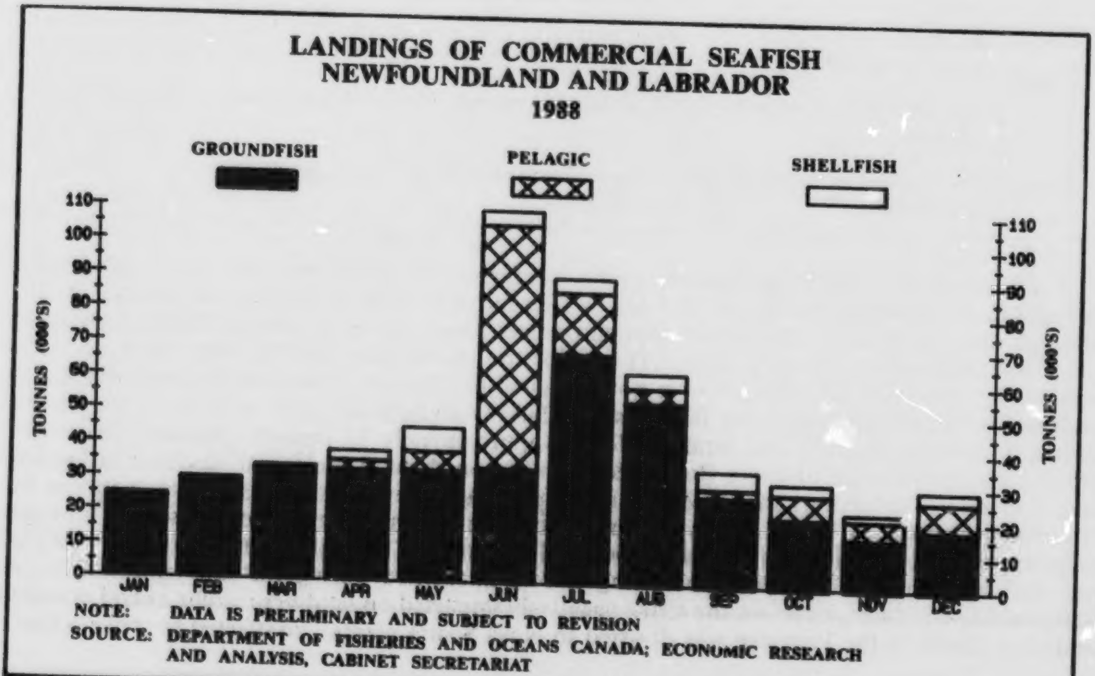
V. FISHERY

The fishing industry accounted for approximately 22 percent of Gross Domestic Product (GDP) in the goods producing sector in 1987 and about eight percent of total GDP. The industry includes both the harvesting of fish and the processing of fish products. The fishing industry is the largest goods producing employer in Newfoundland and Labrador, providing about 22,400 person years of employment in 1988. Much of the employment in this industry is part-year, or seasonal, in nature.

Approximately 12,000 person years of employment are accounted for by primary fishing activities and 10,400 are accounted for by fish processing. Since much of the employment is seasonal, estimates in person years understate the number of people who are employed in the fishing industry. For example, it is estimated that there were approximately 29,000 fishermen registered throughout Newfoundland and Labrador in 1989, comprised of 15,000 part-time and 14,000 full-time fishermen; this compares with only 12,000 person years of employment. The reliance on the fishing industry as a seasonal employment generator, particularly for the rural labour force, is also demonstrated by the fact that during 1988, approximately 27,000 people were listed on the payrolls of approximately 185 fish processing firms located throughout the Province; this compares with 10,400 person years of employment. In all, this amounts to a total of about 56,000 people who depend directly on the fishing industry for employment for some part of the year, in contrast to only about 22,400 person years of employment.

The number of workers and the volume of landings in the fishing industry typically peak during the summer months due to the seasonal operations of some sectors of the fishing industry. Diagram V.1 shows that pelagic landings (comprised mainly of capelin) and groundfish landings (comprised mainly of cod) peak during the summer months when both fish species migrate shoreward. The Province's largest inshore/nearshore sector, based along the Northeast coast of the Island, is in full operation during this summer period. The length of employment for many people involved in fish processing activities is linked to the seasonal harvesting patterns of the fishing industry, and this explains why employment estimates in person years substantially underestimate the actual number of people involved in the fishery.

DIAGRAM V.1



NOTE: DATA IS PRELIMINARY AND SUBJECT TO REVISION

SOURCE: DEPARTMENT OF FISHERIES AND OCEANS CANADA; ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

The Province's primary fishing industry recorded a poorer performance during 1989 as the volume and value of landings fell from 1988. The quantity of fish harvested during the first ten months of 1989 fell by 11.9 percent compared to the same period in 1988 while the value of landings dropped by 14 percent. The main reason for the drop in volume was reduced groundfish landings; groundfish accounted for approximately 68 percent of the total volume of fish landed. Total value fell slightly more than volume due to lower prices for some species, particularly redfish, shrimp and crab.

TABLE V.1

LANDINGS AND LANDED VALUES OF COMMERCIAL SEAFISH NEWFOUNDLAND AND LABRADOR JANUARY TO OCTOBER 1988 AND 1989

Species	Quantity Landed (metric tonnes) 1988	Quantity Landed (metric tonnes) 1989	Value of Landings ($'000) 1988	Value of Landings ($'000) 1989
Groundfish	348,070	295,418	152,125	131,262
	(-15.1%)		(-13.7%)	
Pelagic & Other Fin Fish	114,153	111,057	33,163	35,637
	(-2.7%)		(7.5%)	
Mollusc & Crustaceans	32,182	28,987	65,568	48,646
	(-9.9%)		(-25.8%)	
GRAND TOTAL	**494,405**	**435,462**	**250,856**	**215,545**
	(-11.9%)		(-14.0%)	

Notes: Estimates of Provincial fish landings include the Gulf Region (West Coast of the Province) and the remaining portion of the Island and Labrador known as the Newfoundland Region.

All figures are preliminary and subject to revision. Figures in parentheses refer to percent change.

Source: Department of Fisheries and Oceans; Economic Research and Analysis Division, Cabinet Secretariat.

Cod, which is the main groundfish species, comprises the largest proportion of total landings. Changes in cod landings varied considerably by fleet sector in 1989, as outlined in Table V.2. Higher landings were reported for the inshore/nearshore fleet based in North Atlantic Fisheries Organization (NAFO) division 3PS (see Map V.1) and for the mobile gear fleet in 4RS+3PN. Increased landings by these two fleet sectors were not sufficient to offset decreased landings elsewhere. Cod landings by the inshore/nearshore fleet based in NAFO division 2J+3KL were about the same as the previous year. Overall, cod landings fell by approximately 15 percent, primarily because of reduced landings by the offshore fleet. The main reasons behind the overall decrease in landings were cod quota reductions in 2J+3KL and other NAFO divisions, the strike at National Sea Products during the early part of the year and a poorer performance by some fleet sectors unrelated to quota reductions. Strikes at Fishery Products International during the first quarter of 1989 left year end landings unaffected as harvesting efforts intensified during the last nine months. At National Sea Products, however, the strike negatively impacted on landings insofar as cod normally landed at plants in the Province was diverted to Nova Scotia plants unaffected by strike action.

MAP V.1

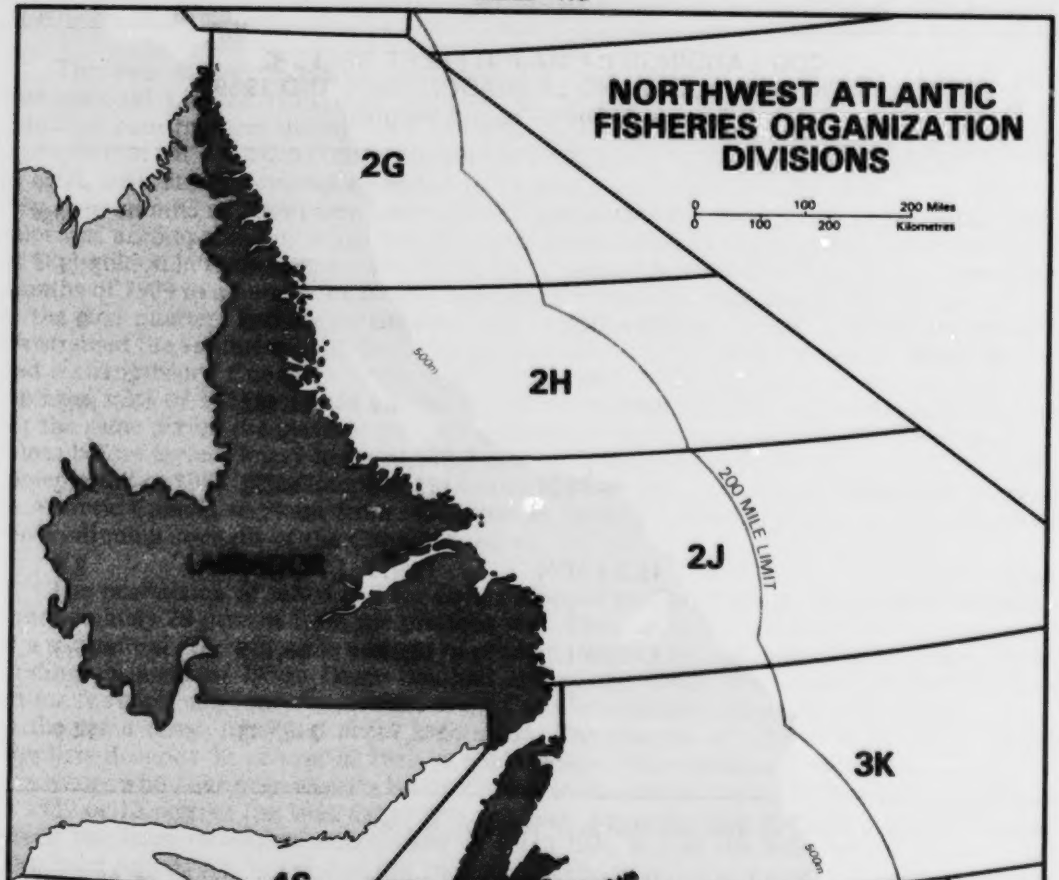

NORTHWEST ATLANTIC FISHERIES ORGANIZATION DIVISIONS
0
100
200 Miles
0
100
200
Kilometres
2G
500m
2H
200 MILE LIMIT
LABRADOR
2J
3K
500m
4S
4R
3M
3L
nose of the bank
4T
3Pn
GRAND
4Vn
3Ps
BANKS
3N
3O
4W
500m
tail of the bank
4X
4Vs

TABLE V.2

COD LANDINGS BY MAJOR FLEET SECTORS
NEWFOUNDLAND AND LABRADOR: 1988 AND 1989
(metric tonnes - round weight)

Fleet Sector	NAFO Area	Quantity Landed 1988	Quantity Landed 1989	% Change
Offshore	All areas	129,432	89,118	-31.1
Inshore/Nearshore Fixed Gear	2J + 3KL	94,568	95,000	0.4
Inshore/Nearshore Fixed Gear	3PS	19,622	21,682	10.5
Inshore/Nearshore Fixed Gear	4RS + 3PN	12,975	8,273	-36.2
Inshore/Nearshore Mobile Gear	4RS + 3PN	19,951	21,700	8.8
Vessels under the Resource Short Plant Program	2J + 3KL	12,298	10,175	-17.3
Total		**288,846**	**245,948**	**-14.9**

Note: Estimates based on data available as of February 1, 1989.

Source: Department of Fisheries and Oceans, St. John's; Provincial Department of Fisheries; Economic Research and Analysis Division, Cabinet Secretariat.

Most fish landed in Newfoundland and Labrador are manufactured into a wide variety of products in fish plants distributed around the coast of the Province. The greatest concentration of fish plants is found on the Northeast coast of the Island and in southern parts of Labrador. Major products of the fish processing industry are fresh fish, frozen whole fish, frozen fillet and block, salted fish, shellfish meat and fish meal. Groundfish fillet and block products remain the most important commodity, generally accounting for around 70 percent of the value of fish production . The fillet and block production mix is determined in the short term by a combination of factors including the availability of quality raw material, contractual agreements between processors and buyers, and the relative prices of groundfish products in the Province's main markets.

Preliminary production estimates for 1989 indicate that the quantity of frozen groundfish products manufactured in the Newfoundland Region was 79,337 tonnes, down by about 14 percent from the previous year. Total fillet production dropped by five percent to 45,346 tonnes and block production fell approximately 25 percent to 25,805 tonnes. Total fillet and block production fell primarily as a result of lower cod landings and hence lower output of cod products. Cod fillet and block production amounted to 27,000 and 23,000 tonnes in 1989, down by 7.3 and 25 percent respectively from the previous year. More cod fillet than cod block was produced during 1989, partly because of higher prices paid for cod fillet compared to cod block in New England, the Province's main market.

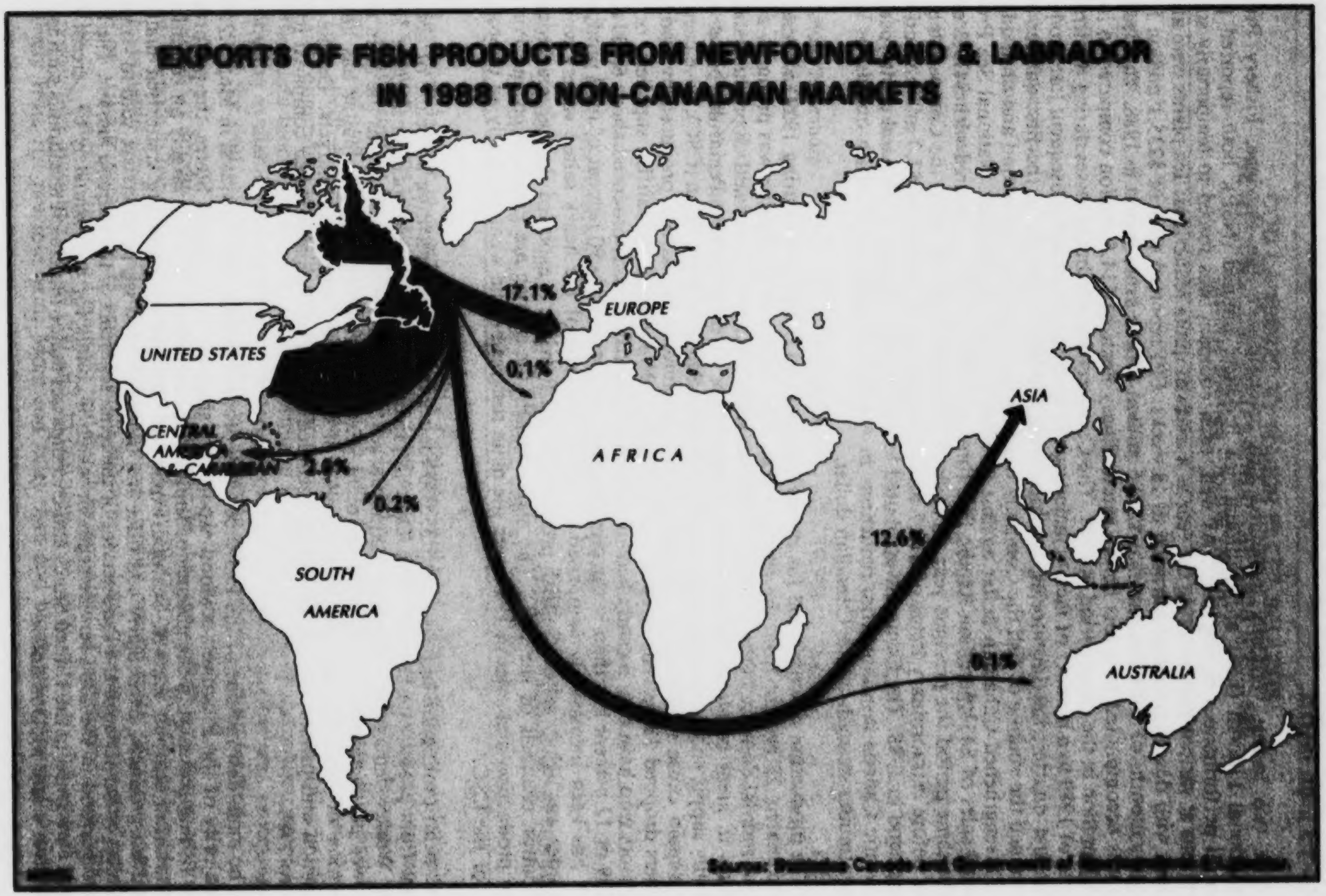
The two largest vertically integrated fish companies in the Province, Fishery Products International Limited (FPI) and National Sea Products Limited (NSP), both reported poorer financial performances during 1989. As well, each company was forced to temporarily suspend operations at various plants during the year as a result of quota reductions. Ten plants were affected in total, with downtime ranging from 6 to 18 weeks. FPI reported sales of $235.1 million for the first nine months of 1989 compared to $279.6 million for the same period in 1988. The decline in sales was accompanied by a loss before extraordinary items of $14.5 million compared to income of $8.3 million in the same period in 1988. The Company has attributed losses during the first nine months of 1989 to a number of factors including the work stoppage and subsequent lost production in the first quarter; low inventories, resulting from the labour dispute in the first quarter, which constrained the volume of fish the Company was able to sell in both the second and third quarters; and a strengthened Canadian dollar against its United States counterpart. National Sea Products reported sales of $454.4 million for the first three quarters of 1989 compared with $419.3 million for the same period the previous year. In spite of the higher value of sales, the Company reported a loss before extraordinary items of $13.7 million compared to income of $2.0 million during the same period in 1988. The Company attributed losses to over capacity in fleet and plant operations in Atlantic Canada resultant from reductions in Atlantic Canadian groundfish quotas, as well as the continuing strength of the Canadian dollar.

The production of salted cod for export dropped to 12,600 tonnes during 1989, a decrease of approximately 28 percent from the previous year. The decline in production was primarily a result of a substantial decrease in the amount of product supplied by traditional saltfish producers. Lower landings in areas of Notre Dame Bay and around the Great Northern Peninsula, places which normally supply substantial quantities to the Canadian Saltfish Corporation (CSC), have been cited as the main cause for the drop in production. The amount of saltfish produced by traditional suppliers dropped 38 percent in 1989 to 6,600 tonnes. Non-traditional saltfish suppliers, or those processors who have only recently become active in the saltfish trade, produced about 6,000 tonnes in 1989 or 12 percent less than in the previous year. Approximately 90 percent of total production, which has been increasingly comprised of small fish, was of the heavy salted variety while the remainder was lightly salted. Saltfish produced in the Province is exported through marketing and distribution channels of the CSC. The main markets for saltfish are Puerto Rico and Portugal. Lower production and sales in 1989 were the main reasons behind what was likely an unprofitable year for the CSC.

Capelin production approximated 35,000 tonnes in 1989, representing a decline of about 15 percent from production levels in 1988. Capelin prices fell by about seven percent to US$1,560 per tonne. Weaker demand in Japan, the major market for frozen female capelin, was the main reason for lower production and prices. As in recent years, Newfoundland and Labrador has held the distinction of being the number one supplier of capelin to east Asian markets. Despite lower production and prices, the capelin fishery recorded a solid performance when compared to years prior to 1988.

The main destinations of the Province's fish product exports are illustrated in Map V.2. Since the majority of the Province's seafood exports are shipped to the United States, the performance of the fishing industry, in the absence of supply side constraints, depends largely on conditions in the American seafood market. Seafood exports to the United States are comprised mainly of groundfish products, particularly cod fillet and block. Groundfish products are sold to American consumers either through the food-service or the retail segments of the seafood market. The largest user of seafood is the food-service segment which accounts for approximately 64 percent of all seafood consumed in the United States and encompasses major franchised restaurants such as Long John Silver's and McDonald's.

MAP V.2



EXPORTS OF FISH PRODUCTS FROM NEWFOUNDLAND & LABRADOR IN 1988 TO NON-CANADIAN MARKETS

Source: Statistics Canada and Government of Newfoundland & Labrador

Most of the Province's fish exports to the United States enter the seafood market through the New England area. Cold storage holdings in this area reflect the amount of groundfish available to fish buyers; significant changes can sometimes be interpreted as an indication of the future trend which groundfish prices may take. That is, when inventories rise, prices often fall whereas when inventories fall, prices often rise. Throughout mid-1988, for example, New England cold storage holdings remained relatively high and during the same period, prices for cod fillet and block declined dramatically. By year-end, however, inventories had declined and prices had begun to rise. Inventories of cod fillet at the end of 1989 were about 30 percent higher than at year-end in 1988 while cod block holdings were approximately 42 percent lower, as outlined in Table V.3. Despite the fact that cod fillet inventories were higher at year-end, the downward pressure on price that might be expected from higher inventories could be offset by shortages on the supply side. Indeed, the inventory build up of fish products may have been in anticipation of reduced supplies. Seafood market analysts are of the opinion that traditional suppliers of cod (Canada, Iceland and Norway) will experience another drop in landings during 1990, putting upward pressure on prices.

TABLE V.3

NEW ENGLAND COLD STORAGE HOLDINGS
END OF YEAR GROUNDFISH STOCKS
(metric tonnes - product weight)

	December		% Change
	1988	1989	Dec. 1989/88
Cod Fillet	5,673	7,383	30.1
Other Fillet	11,943	13,743	15.1
Total Fillet	**17,616**	**21,126**	**19.9**
Cod Block	9,636	5,569	-42.2
Other Block	10,038	10,791	7.5
Total Block	**19,674**	**16,360**	**-16.8**

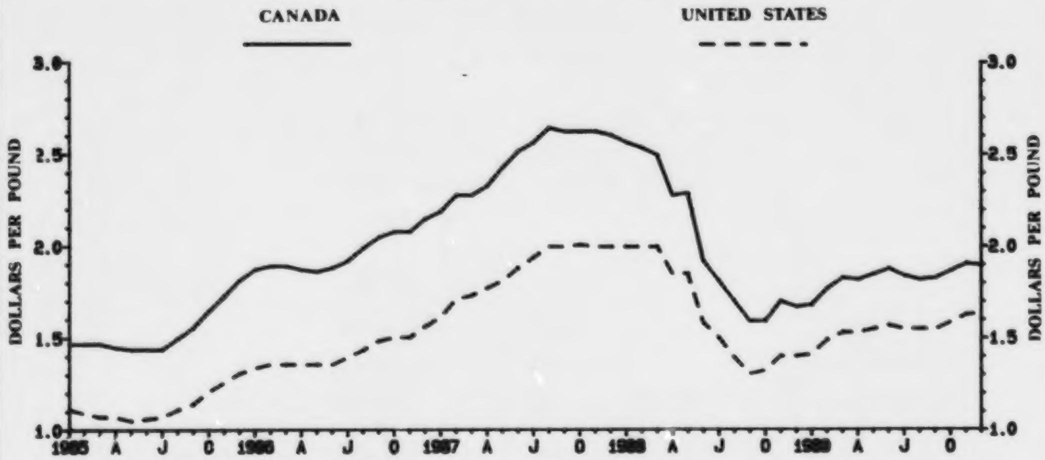
Source: Department of Fisheries; Economic Research and Analysis Division, Cabinet Secretariat.

Cod block prices expressed in both American and Canadian dollars are illustrated in Diagram V.2. American prices are determined by prevailing market conditions for cod block, while the Canadian price reflects both market conditions and the prevailing exchange rate between the currencies of the two countries. In the period between May 1985 and August 1987, fish prices in the United States rose reflecting strong market conditions for cod block. For much of this period, the Canadian dollar depreciated against its United States counterpart. As a result, Canadian exporters reaped higher profits due to higher fish prices and a weaker dollar. In August 1987, cod block prices peaked at Cdn$2.65 per pound or US$2.00 per pound. While cod block prices in American dollars remained at this plateau from August 1987 up to and including March 1988, prices in Canadian dollars declined steadily. The fall in Canadian prices despite unchanged American prices was caused solely by the appreciation of the Canadian dollar against the United States dollar. As the diagram illustrates, the spread between the two prices during this period narrowed reflecting the rising value of the Canadian dollar. In April 1988, fish prices in the United States began to fall as cod block markets weakened. Also, the Canadian dollar continued to strengthen, depicted by the continued narrowing of the price differentials, resulting in larger declines in Canadian prices than American prices. It was during this period that many fish exporters reported poorer financial statements as both fish prices and exchange rates now moved in directions totally unfavourable to

Canadian producers. Cod block prices, expressed in both currencies, bottomed out around September 1988 and began increasing toward the end of 1988. Although some fluctuations were observed, prices continued on an upward trend throughout 1989. The slight narrowing of the price spread during 1989 reflects a 3.2 percent appreciation of the Canadian dollar against the American dollar from the end of 1988 to December 1989. Hence, while price movement has been favourable in the past year, the Canadian dollar continued to move in an unfavourable direction.

DIAGRAM V.2

COD BLOCK PRICES
CANADIAN AND AMERICAN DOLLARS
1985 TO 1989

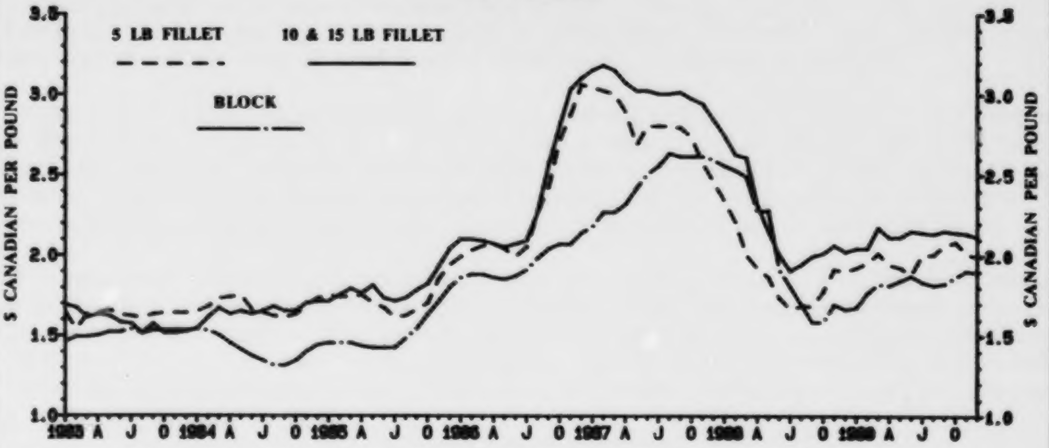


NOTE: BLOCK REFERS TO 16.5 LB. PACK
SOURCE: NEWFOUNDLAND STATISTICS AGENCY, ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT; DEPARTMENT OF FISHERIES

Prices for cod products, in Canadian dollar terms, varied during 1989, as outlined in Diagram V.3. Wholesale prices for the five pound cod fillet pack averaged $1.99 per pound, approximately 4.7 percent higher than average prices during the previous year. Prices for the ten and fifteen pound cod fillet packs averaged $2.13 per pound, about 3.6 percent less than the average price in 1988. Similarly, cod block prices were lower on average in 1989. Cod blocks averaged $1.83 per pound, approximately nine percent below prices realized in the previous year. While prices for the five pound cod fillet pack were higher and those for other products lower on average, prices for all product types fluctuated throughout the year. Cod prices in general, however, were higher at year end compared to the beginning of 1989, reflecting, to some degree, lower inventories and the constraints on the supply of these products from the Atlantic Regions. Price variations among these products reflect different costs associated with the preparation of each. For example, the 10 and 15 pound cod fillet pack requires smaller fillets and sizing to ensure consistency. Higher production costs for this product translates into a higher market price. Fish prices are expected to remain firm up to and including the Lenten period, traditionally a time of heavy fish consumption. In the post-Lenten period, analysts expect that there could be some upward pressure on prices given the cod quota reductions in the North Atlantic and possible decreases in the supply of cod products during 1990.

DIAGRAM V.3

BOSTON BLUE SHEET WHOLESALE PRICES
FROZEN COD PRODUCTS
1983 TO 1989



NOTE: BLOCK, 5 LB. FILLET AND 10 & 15 LB. FILLET PRICES REFER TO 16.5 LB. PACK, 5 LB. CELLO 1-3 FILLET PACK AND 10 & 15 LB. LAYER PACK

SOURCE: NEWFOUNDLAND STATISTICS AGENCY, ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT; DEPARTMENT OF FISHERIES

The outlook for the Province's fishing industry in 1990 is for lower groundfish landings as a result of further reductions in the Total Allowable Catch (TAC) of groundfish. In particular, a 38,000 tonne reduction in the quota of Northern Cod and quota reductions in southern NAFO fishing zones and the Gulf of St. Lawrence will translate into lower landings and lower plant utilization rates. The success of the inshore/nearshore fleets could mitigate, but certainly not offset, the effects of reduced cod quotas on the industry.

Fish plants operated by FPI in Gaultois, Grand Bank and Trepassey were expected to close in 1990 because of quota reductions, however, the closure of these three plants was delayed until at least 1991 through a negotiated financial arrangement between the Province and FPI. Similarly, NSP's decision to close its St. John's fish plant has been countered with a similar offer of financial aid. The Company reviewed the proposal and returned with plans to establish a shrimp processing facility. The facility would generate approximately 100 person years of employment, or jobs for about 170 people to be facilitated through a work sharing arrangement. The implementation of this proposal depends on the outcome of Company and employee discussions.

Iceland and Norway, like Canada, also face groundfish quota reductions in 1990. As these three North Atlantic fishing nations supply the bulk of cod to the United States market, analysts are expecting fish prices to continue to rise, particularly for cod blocks. The Canadian dollar is expected to weaken and this, coupled with steady or rising prices, would aid in offsetting lower revenues related to the expected reduction in output.

The capelin fishery, which has figured quite prominently in the fishing industry's performance in recent years, is expected to record another solid year. Other traditional suppliers, like Norway, are expected to supply only limited amounts due to resource constraints, thus leaving Newfoundland with the lion's share of the market.

VI. FORESTRY

The forest industry is comprised of both primary activities, including harvesting and forest management, and the secondary processing of wood into such products as newsprint and lumber. This industry accounted for about 7.7 percent of Gross Domestic Product (GDP) in the goods producing sector in 1987 and 2.9 percent of total GDP. The forest industry generated 4,300 person years of employment on an annual average basis in 1988, making it the third largest employer in the Province's goods producing sector. Much of the employment in primary forest activities, which accounts for about one-third of total forestry employment, is seasonal or part-year.

About 83 percent of timber harvested in Newfoundland and Labrador is used in the Province as raw material for the manufacture of products such as newsprint, sawn lumber and construction timbers. The remaining timber harvested is burned locally as fuel except for a small amount which is exported as pulpwood to European markets. Pulpwood used in the production of newsprint by the Province's three pulp and paper mills accounts for the largest share of harvested timber.

The volume of pulpwood produced during 1989 amounted to about 1.76 million cubic metres, down by 6.3 percent from the previous year. Following a weak first half performance, pulpwood production reached its highest third quarter level in five years. In contrast, pulpwood production hit a five year low in the fourth quarter, which served to constrain annual production; Abitibi-Price suspended harvesting operations earlier than usual in October 1989 as the Company anticipated lower pulpwood demand in 1990.

TABLE VI.1

FORESTMANAGEMENT EXPENDITURES AND OUTPUT 1986-87 TO 1989-90(1)

	1989/90p	Total (1986/87 to 1989/90)
Expenditures ($ million)		
Silviculture	7.61	28.58
Forest Access Roads	1.04	5.42
Forest Management	3.40	9.65
Forest Protection	0.81	2.05
Forest Industries Development	0.62	1.96
Administration, Communication & Evaluation	0.61	2.82
Total Expenditures(2)	**14.07**	**50.48**
Silviculture Output		
Total Area Treated (hectares)	13,002	47,343
Seedlings Planted (millions)	11.6	36.7

Notes: (1) Includes Canada/Newfoundland Forest Resource Development Agreement 1986-1990, expenditures only.

(2) Column totals may not add due to independent rounding.

p: preliminary estimate

Source: Department of Forestry and Agriculture.

In addition to harvesting operations, primary forestry activities include the management and protection of the Province's forest resource, a responsibility which rests with the Provincial Government. Management activities, which are carried out in conjunction with the pulp and paper industry, are designed to ensure long term timber supplies by enhancing resource productivity through accelerated forest growth and greater resource utilization. The 1986-1990 Canada/Newfoundland Forest Resource Development Agreement is the primary funding source for forest resource enhancement activities. Expenditures under the Agreement during 1989/90 were an estimated $14.1 million while the pulp and paper industry contributed an additional estimated $2.0 million. Expenditures under the Agreement since 1986/87, and the types of activities funded, are outlined in Table VI.1.

The Province spends in excess of $16 million annually in addition to the Forest Resource Development Agreement expenditures on forest protection, enforcement of regulations, personnel and other activities. The protection of the resource from damage by forest fires, insects and disease, is a very important aspect of Government's forest management responsibilities, comprising a large proportion of these expenditures. The Province experienced a medium forest fire season in 1989 with 192 fires reported which burned just over 68,000 hectares. Only a small proportion of the total area burned, 2,258 hectares or 3.3 percent, was considered to be merchantable, or commercial timber stands. Excluding 1988/89, which was the best forest fire season in recent history, this compares favourably to previous years as illustrated in Table VI.2. The bulk of the area burned in 1989/90 was non-merchantable timberland lost as a result of large fires in western Labrador. The spruce budworm infestation which began in the 1970s has subsided making aerial spraying unnecessary since 1985. The recent outbreak of the hemlock looper has also subsided somewhat and the area requiring aerial spray treatment declined from 125,000 hectares in 1985 to 5,400 hectares in 1989, all of which was treated with the bacterial agent BT.

TABLE VI.2

FOREST FIRE STATISTICS
NEWFOUNDLAND AND LABRADOR
1986-87 TO 1989-90

	1986/87r	1987/88r	1988/89r	1989/90p
Number of Fires Reported	193	287	116	192
Total Area Burned (ha)	108,831	17,129	1,758	68,158
Merchantable Timber Burned (ha)	22,481	8,784	7	2,258
Suppression Costs ($ million)*	$4.7	$3.0	$2.5	$3.4

Notes: * This cost excludes waterbomber expenses from the Department of Works, Services and Transportation.

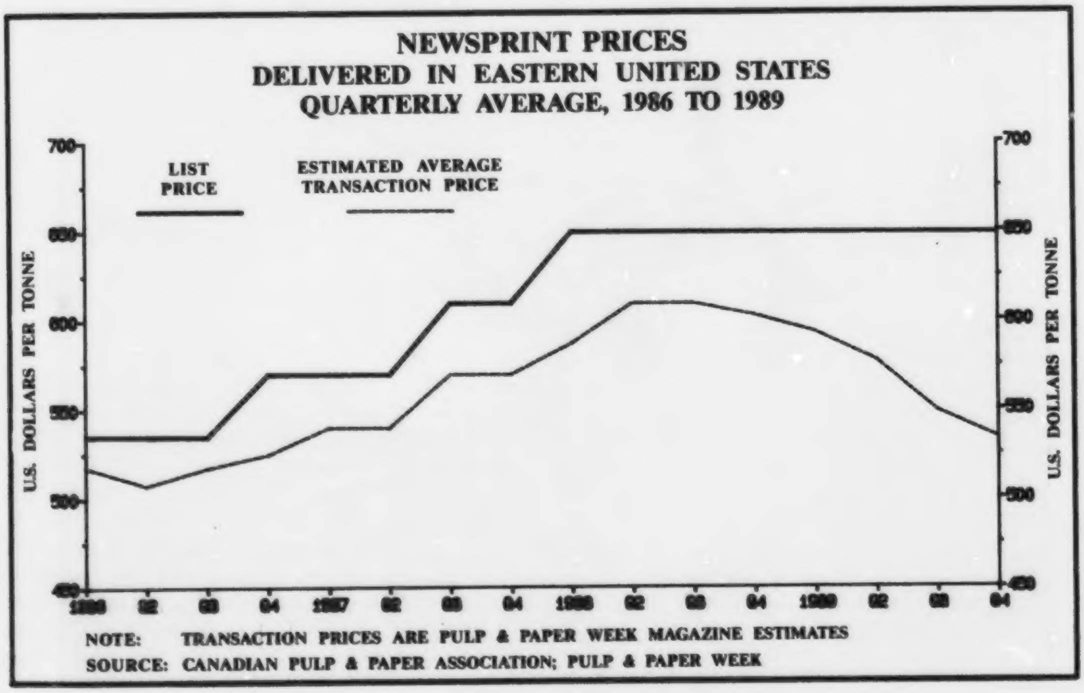
p: preliminary; r: revised; ha: hectare

Source: Department of Forestry and Agriculture.

Production of newsprint dominates manufacturing activity in the forest industry. There are three pulp and paper mills in the Province, located in Corner Brook, Grand Falls and Stephenville, all of which rely heavily on highly competitive foreign markets, particularly the United States and Europe (see Map VI.1). Conditions in these markets have a significant bearing on the performance of the industry in this Province and the rest of Canada.

Price activity is a good barometer of conditions in key markets, and prices in the United States, the largest single market for newsprint in the world, tend to lead world prices for this commodity. Newsprint list prices and transaction prices are illustrated in Diagram VI.1. List prices refer to the price which sellers of newsprint have jointly established as a basis for negotiating sales contracts with their customers. Transaction prices are those at which the product actually sells, and takes into account discounts from the list price. Discounts vary in magnitude depending on a number of factors including individual vendor-client relationships, size and duration of the contract, delivery time, currency of the transaction and other market forces such as general supply and demand conditions. List prices and transaction prices rose steadily between 1986 and 1988, reflecting the strong market conditions which prevailed. While there has been no change in list prices since January 1988, transaction prices declined steadily in 1989, reflecting soft markets in the United States. List prices in the eastern United States (a benchmark price) remained at US$650 per tonne during 1989, but transaction prices fell to average around US$535 per tonne at year end, nearly 18 percent below list prices. These discounts resulted from an oversupplied market, exacerbated by new sources of production which came on stream during the year. In addition, producers adding new capacity in 1990 were also competing for future supply contracts which put further downward pressure on prices. The sales revenue received by Canadian producers was eroded in 1989 due not only to price discounting, but also due to other factors. Revenues were adversely affected by the reduced volume of shipments and by the appreciated value of the Canadian dollar against its United States counterpart during the year (see Section I). Although one major newsprint producer has announced an increase in list prices of US$35 per tonne to take effect in May 1990, analysts are skeptical as to whether such an increase can hold given the current market environment in North America.

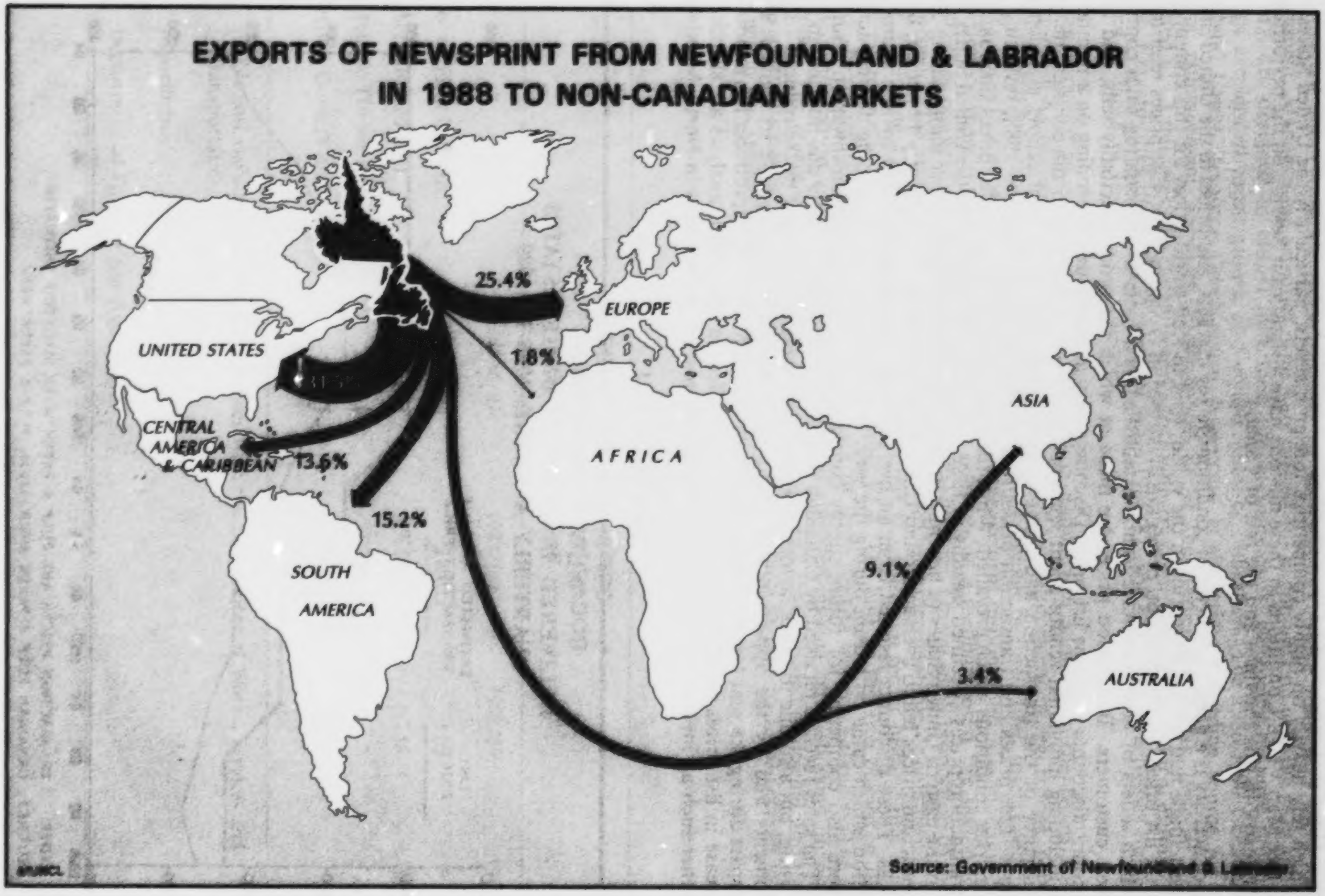
DIAGRAM VI.1



NEWSPRINT PRICES
DELIVERED IN EASTERN UNITED STATES
QUARTERLY AVERAGE, 1986 TO 1989

NOTE: TRANSACTION PRICES ARE PULP & PAPER WEEK MAGAZINE ESTIMATES
SOURCE: CANADIAN PULP & PAPER ASSOCIATION; PULP & PAPER WEEK

MAP VI.1



EXPORTS OF NEWSPRINT FROM NEWFOUNDLAND & LABRADOR
IN 1988 TO NON-CANADIAN MARKETS

Source: Government of Newfoundland & Labrador

The Canadian newsprint industry, which is the largest supplier of newsprint in the world, experienced a slowdown in 1989 reflecting conditions in international markets. The industry operated at 95 percent of rated capacity during the year, a decrease of four percentage points from 1988 (see Table VI.3). Most newsprint mills took some market related downtime in attempts to reduce mill inventories. Production approximated 9.7 million tonnes in 1989, a decrease of 2.9 percent from 1988, and the volume of shipments also declined by 2.0 percent. Shipments to United States and Canadian customers declined by 4.1 and 6.1 percent respectively. This was offset somewhat by a 10.3 percent increase in shipments to other offshore markets, particularly Europe.

TABLE VI.3

SELECTED CANADIAN AND UNITED STATES NEWSPRINT STATISTICS ('000 Tonnes)

Canada	1988r	1989p	Percent Change
Operating Rate (%)	99	95	
Production	9,969	9,678	-2.9
Shipments	9,867	9,665	-2.0
To United States	7,087	6,799	-4.1
To Canada	1,227	1,152	-6.1
To Other Markets	1,554	1,714	10.3
Mill Stocks (December)*	290	304	4.8
United States			
Production	5,427	5,523	1.8
Total Consumption	12,337	12,304	-0.3
Mill Stocks (December)*	48.1	56.4	17.3
Consumer Stocks (December)*	1,469	1,180	-19.7
Days Supply (December)*	46	38	

Notes: * Indicates level at the end of December

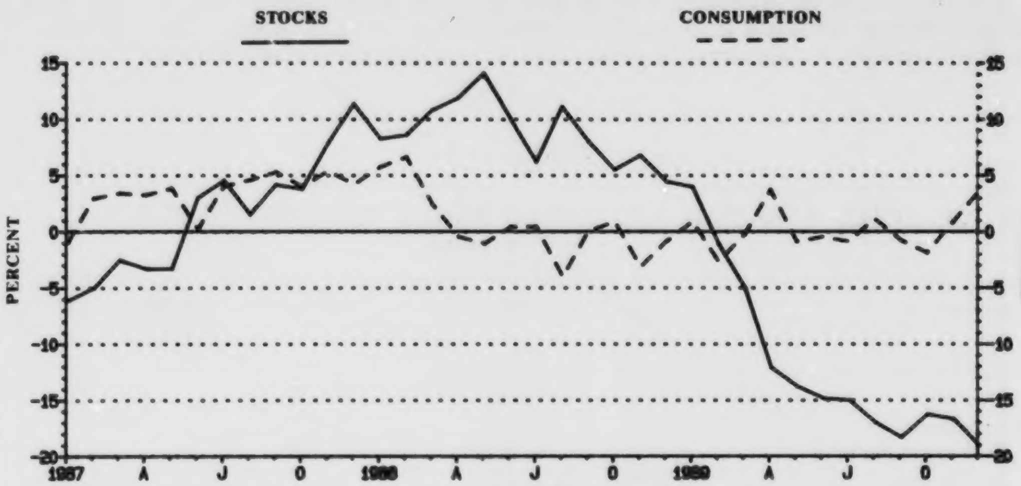
p: preliminary; r: revised

Source: Canadian Pulp and Paper Association, Monthly Newsprint Statistics.

The slowdown experienced by the Canadian industry was directly related to soft market conditions in the United States, the largest and most important export market for Canadian producers. While consumption of newsprint in the United States fell by only 0.3 percent, consumer inventories of newsprint stood 19.7 percent lower at the end of December 1989 than a year earlier (see Diagram VI.2). This rapid rundown of inventories, which is in sharp contrast to the accumulation of consumers' stocks that occurred during most of 1987 and 1988, served to lower the volume of newsprint purchased by consumers in 1989. The slowdown of consumption was primarily due to sluggish advertising growth and more economical usage of newsprint by United States publishers. The weakening of demand by consumers in combination with increased productive capacity in North America was reflected in rising mill inventories in both Canada and the United States, and heavy price discounting.

DIAGRAM VI.2

CONSUMERS' STOCKS AND CONSUMPTION OF NEWSPRINT UNITED STATES, 1987 TO 1989



NOTE: SOME DATA FOR 1989 IS PRELIMINARY; YEAR-OVER-YEAR CHANGE IN CONSUMPTION AND STOCKS; STOCKS AT END OF MONTH

SOURCE: CANADIAN PULP AND PAPER ASSOCIATION

The Province's newsprint industry experienced a mixed performance during 1989. Shipments declined slightly, however, production increased by 1.2 percent to 656,194 tonnes despite the fact that each of the three mills experienced some market related downtime during the year. Production at the Corner Brook mill increased by about 34,000 tonnes as modernization work on the largest paper machine was completed during the first half of the year, permitting record production levels for the mill operator in the latter part of the year. Production at Stephenville also increased slightly. Increases in production at these mills served to offset losses in output at the Grand Falls mill. Production at the Grand Falls mill declined by nearly 34,000 tonnes due to difficulties in marketing the low quality paper which makes up some of this mill's output coupled with generally soft market conditions. The problems experienced at the Grand Falls mill during 1989 led Abitibi-Price to announce late in the year that it would permanently close down the No. 6 newsprint machine and eliminate the sulphite pulping plant. In excess of 200 permanent jobs will be eliminated as a result of the restructuring at the Grand Falls newsprint mill. The Company's decision, which will reduce annual newsprint capacity by about 50,000 tonnes, is a response to the current situation of world over-capacity and increased competition in international newsprint markets which make it increasingly difficult to market the lower quality paper produced by the No. 6 machine. The lower quality of this paper results from the age of the machine, and from the sulphite pulp used for production. The elimination of the sulphite pulp coupled with the closure of this newsprint machine will enable the mill to balance its paper production from the two remaining machines with its higher quality Thermo Mechanical Pulp (TMP) capacity. The restructuring of the Grand Falls operation, which will commence in March 1990, is part of a plan to improve the overall paper quality and mill efficiency, thus improving the mill's ability to compete in ever more quality conscious markets.

The volume of newsprint shipped during 1989 was 644,152 tonnes, a decrease of 0.3 percent from the previous year as producers stockpiled newsprint in response to a weak market. Following a slow first half, improved shipments in the third quarter coincided with increased production at the Corner Brook mill. Newsprint shipments in the fourth quarter reached their highest level in eight years as exports to the United States improved significantly. It is believed that this improvement may have been partly the result of stockpiling in the face of potential work stoppages in the second quarter of 1990; labour contracts at most eastern Canadian pulp and paper mills, which are key exporters to the United States, expire at the end of April 1990. The gross value of newsprint shipments during the year, based on estimated average transaction prices, fell by about 10 percent to an estimated $430 million. The decline in the value of newsprint shipments reflected not only the slightly lower volume of shipments, but also heavy price discounting and the appreciated value of the Canadian dollar against other major currencies.

TABLE VI.4

NEWSPRINT PRODUCTION STATISTICS
NEWFOUNDLAND AND LABRADOR
1988 AND 1989p

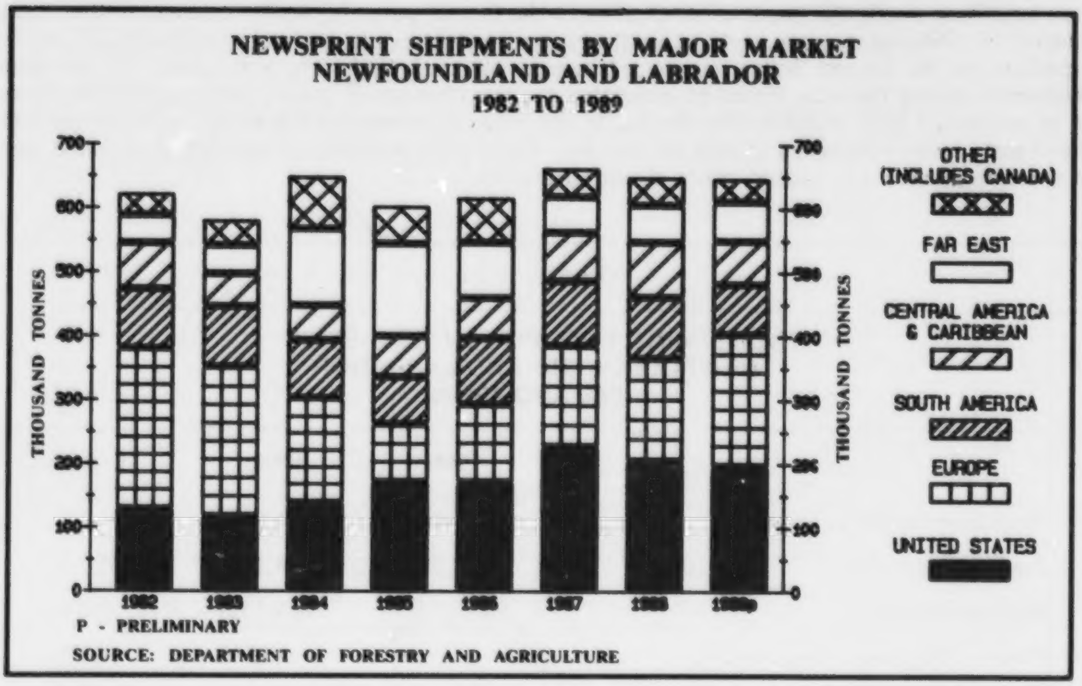
	1988r	1989p	% Change
Productive Capacity (tonnes)	723,000	754,000	4.3%
Production (tonnes)	648,298	656,194	1.2%
Shipments (tonnes)	646,388	644,152	-0.3%
Value of Shipments ($ million)	$477.6	$429.9	-10.0%

Notes: r: revised; p: preliminary; Value of Shipments based on estimated average transaction prices.

Source: Canadian Pulp and Paper Association; Pulp and Paper Week Magazine; Department of Forestry and Agriculture.

Shipments of newsprint from the Province by major market for the past seven years are illustrated in Diagram VI.3. Shipments to the United States and Europe continued to dominate exports in 1989, comprising about 62.6 percent of the total volume sold to non-domestic customers. Shipments to the United States declined by 4.2 percent in 1989, representing the second consecutive year of declining shipments and reflecting the soft market conditions which prevailed. European market penetration has improved in recent years, partly because the value of the Canadian dollar relative to the currencies of European customers and competitors has remained below 1985 levels. Shipments to European customers improved by 28.9 percent in 1989, offsetting for the most part, the declines in shipments to the United States and other markets. Exports to South and Central American and Caribbean markets, which collectively accounted for 23 percent of total shipments, declined substantially in the face of increased competition from United States producers who were forced to seek alternative markets for their newsprint because of weak domestic demand. The industry continued to export to a number of other markets, as the remaining 14.4 percent of exports were shipped to customers in 13 countries around the world.

DIAGRAM VI.3



NEWSPRINT SHIPMENTS BY MAJOR MARKET
NEWFOUNDLAND AND LABRADOR
1982 TO 1989

P - PRELIMINARY

SOURCE: DEPARTMENT OF FORESTRY AND AGRICULTURE

Sawmilling is the second largest manufacturing activity in the Province's forest industry. Virtually all of the lumber produced is consumed in local markets. Sawmilling activity increased in 1989 as demand for domestically produced lumber continued to improve, spurred by strong growth in residential dwelling starts during the year. Preliminary estimates indicate that production reached over 50 million board feet in 1989/90, a slight increase over the previous period, representing the seventh consecutive year of growth in sawmill production. In addition, the provision of a Provincial lumber grading service through the Newfoundland Lumber Producers Association has improved the acceptance of domestically produced lumber by Provincial consumers. It ensures that domestic lumber meets the same quality standards as lumber imported from mainland Canada.

Continued soft market conditions are expected to constrain the Provincial pulp and paper industry in 1990. It is expected that the United States newsprint market will continue to be oversupplied, and that many traditional North American suppliers will look towards other markets. As a result, the European market is becoming more competitive. Newsprint prices are not expected to make any substantial recovery in 1990 as capacity additions, particularly in North America, will add to existing excess newsprint supplies.

On the production side, Abitibi-Price will lose about 50,000 tonnes of net annual capacity by March 1990 as the Company rationalizes its Grand Falls operation. The net effect on production, however, may be a reduction in annual output of less than 7,000 tonnes as the mill operated at low levels in 1989. Abitibi-Price Stephenville has scheduled seven weeks of market related downtime for 1990, plus an additional week to upgrade some production equipment, which could translate into a loss of about 20,000 tonnes from 1989 levels of output. Corner Brook Pulp and Paper Ltd., on the other hand, plans to increase production by about 36,000 tonnes on the strength of the largest paper machine operating for a full year in 1990. Overall, the industry could boost production above 1989 levels during the year, however, the level of output at the Corner Brook and Stephenville mills will depend upon the availability of markets. Labour contracts at each of the three mills expire at the end of April 1990, a factor which may, depending on the outcome of negotiations, affect production levels.

The mill modernization program, which began in 1985, continued during 1989. The original Industry-Government Pulp and Paper Mill Modernization Program at the Corner Brook mill, valued at nearly $230 million, was substantially completed in 1989, with expenditures totalling about $224 million by year end. The Company is undertaking additional improvements to the mill which will bring cumulative expenditures between 1985 and 1992 to about $360 million. Although Abitibi-Price Grand Falls completed its Mill Modernization Programs in 1987, the Company intends to invest about $113 million by the year 2000 to further improve the mill operation. By 1993, the mill will have spent nearly $33 million to upgrade the TMP system, and improve effluent and emmision control systems. The upgrade of the TMP system, coupled with the elimination of less efficient portions of the operation in 1990, will further improve paper quality. The modernization of the pulp and paper industry has already improved mill efficiency and the overall quality of newsprint produced at both the Corner Brook and Grand Falls mills. Further improvements, including the production of more diversified paper grades and reduced waste emissions, will be realized upon completion of these programs. Factors such as these are essential to improving the industry's efficiency and ensuring a continued market presence in an increasingly competitive international market environment.

Overall, the Province's forest industry is expected to experience difficulties in 1990. Any market related decline in newsprint production would also adversely affect pulpwood production. The sawmill industry could be negatively affected by anticipated declines in the level of residential construction activity; as such, sawlog production could decline for the first time in several years. Expenditures on forest management will depend on the signing of a new Federal/Provincial Forest Resource Development Agreement, as the current Agreement expires in March 1990. Forest management activities are targeted to at least match 1989 levels during the year contingent upon a new Agreement.

VII. MINING

The mining industry accounted for approximately 18.9 percent of GDP in the Province's goods producing sector and 7.0 percent of total GDP in 1987. A diverse range of mineral commodities is produced by the Province's mining industry as indicated in Table VII.1, however, iron ore continues to dominate the industry, accounting for about 82 percent of the total value of mineral shipments during 1989. In addition to mineral production, the industry continued to search for new sources of base metals, gold and industrial minerals for future development and extraction. Map VII.1 illustrates the locations of producing and developing mines, and major exploration projects throughout Newfoundland and Labrador.

TABLE VII.1

MINERAL PRODUCTS PRODUCED IN NEWFOUNDLAND AND LABRADOR DURING 1989 IN ORDER OF CONTRIBUTION TO TOTAL VALUE OF SHIPMENTS

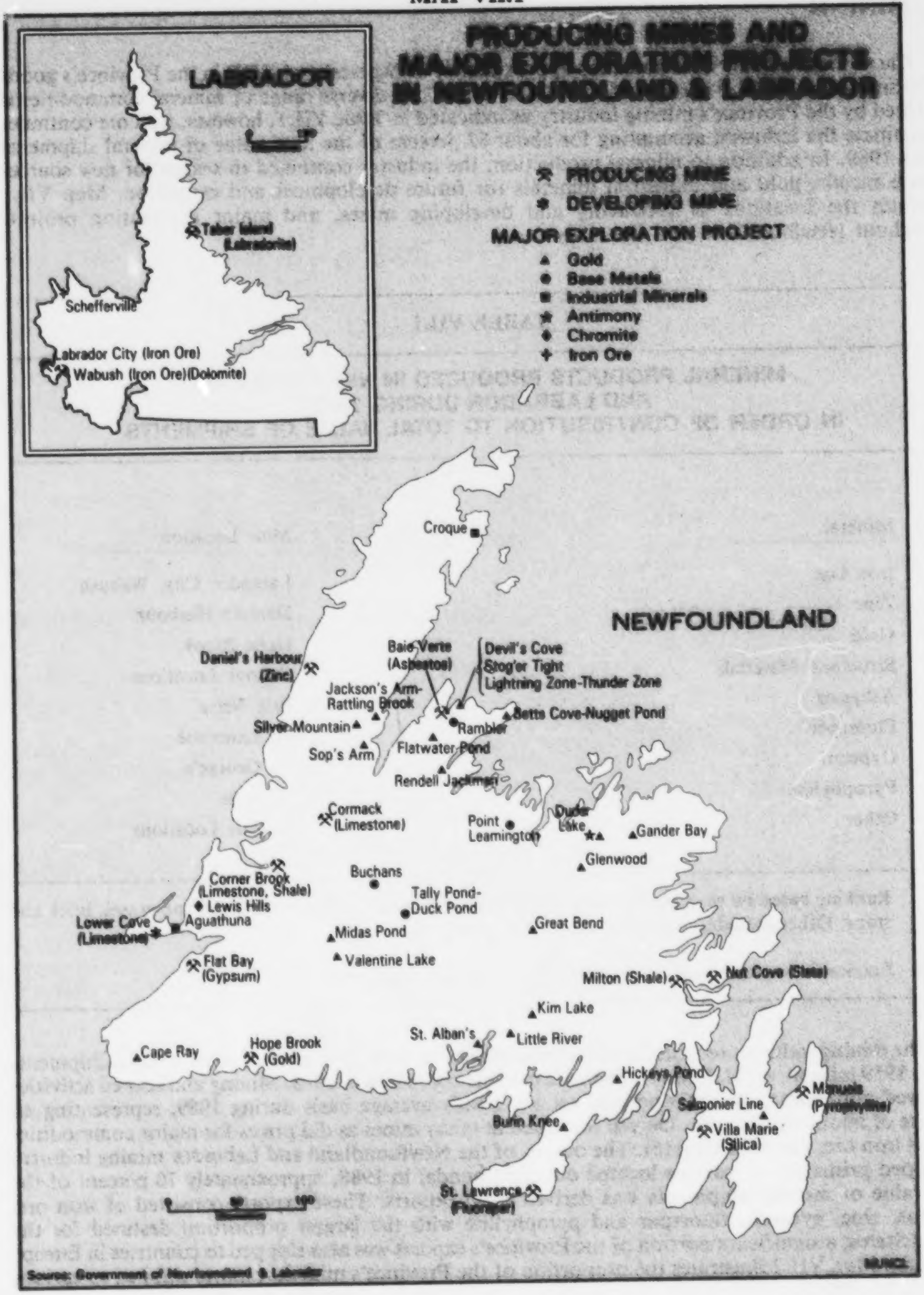
Mineral	Mine Location
Iron Ore	Labrador City, Wabush
Zinc	Daniel's Harbour
Gold	Hope Brook
Structural Materials	Various Locations
Asbestos	Baie Verte
Fluorspar	St. Lawrence
Gypsum	St. George's
Pyrophyllite	Manuels
Other	Various Locations

Note: Ranking based on preliminary data. Structural materials include cement, sand and gravel, brick and stone. Other includes cadmium, gemstones, peat and silver.

Source: Economic Research and Analysis Division, Cabinet Secretariat.

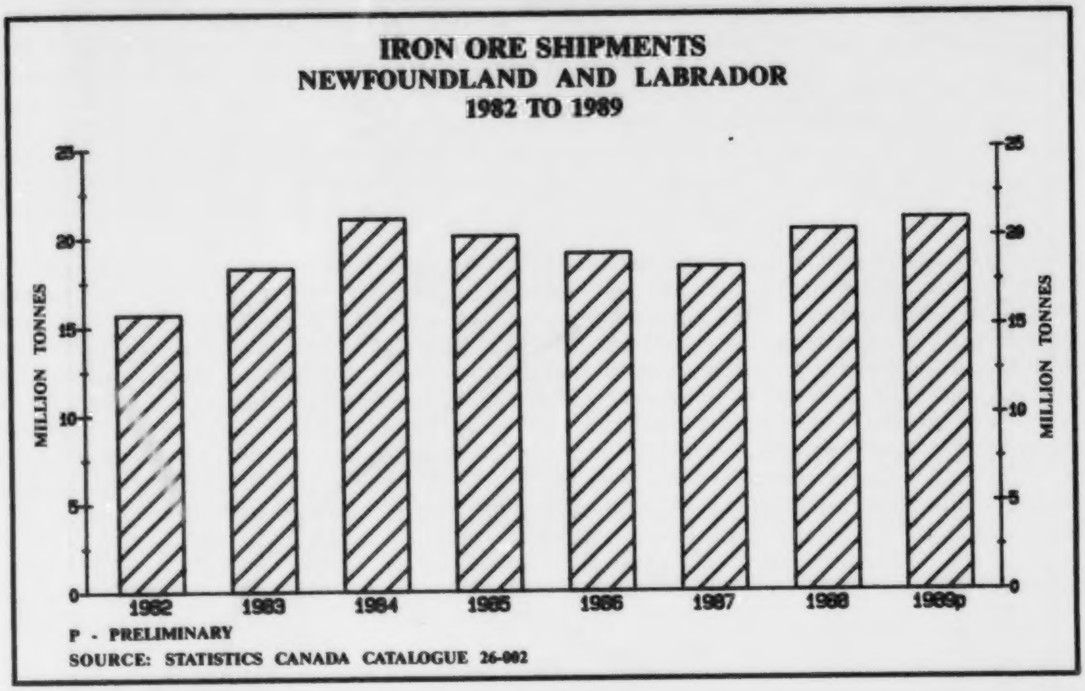
The mining industry recorded a solid performance in 1989. The total value of mineral shipments rose to $959 million, an 11.1 percent increase in value compared to 1988. Mining and related activities employed approximately 4,400 persons on a monthly average basis during 1989, representing an increase of about five percent. Output increased at many mines as did prices for major commodities such as iron ore, zinc and asbestos. The output of the Newfoundland and Labrador mining industry is shipped primarily to markets located outside Canada; in 1988, approximately 70 percent of the total value of mineral shipments was derived from exports. These exports consisted of iron ore, asbestos, zinc, gypsum, fluorspar and pyrophyllite with the largest proportion destined for the United States; a significant portion of the Province's exports was also shipped to countries in Europe and Asia. Map VII.2 illustrates the proportion of the Province's mineral exports shipped to various markets in 1988.

MAP VII.1



Source: Government of Newfoundland & Labrador

DIAGRAM VII.1


IRON ORE SHIPMENTS
NEWFOUNDLAND AND LABRADOR
1982 TO 1989

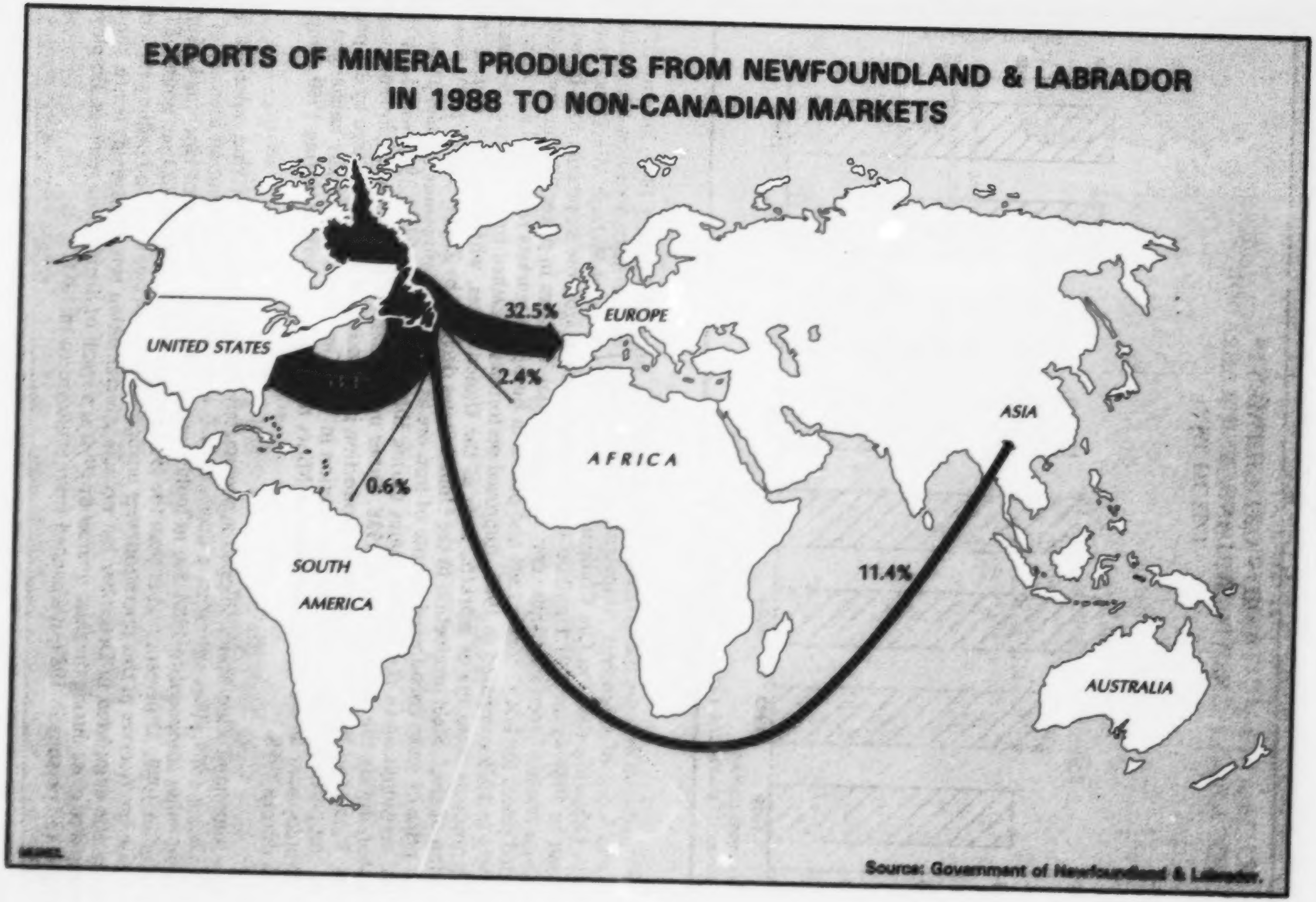
P - PRELIMINARY

SOURCE: STATISTICS CANADA CATALOGUE 26-002

The Provincial iron ore industry recorded its best year since 1984 during 1989, in terms of both volume and value of shipments. Shipments of iron ore by the Province's two iron ore producers located in Labrador, the Iron Ore Company of Canada (IOCC) and Wabush Mines, increased by 3.0 percent in 1989 to total 21.1 million tonnes. The value of iron ore shipments rose by over 13 percent as a result of increased shipments and substantial increases in prices of iron ore products. Negotiated prices for IOCC concentrate and pellets in European markets rose by 14 and 21 percent respectively in 1989 compared to 1988. Improved performance resulted from increased demand for iron ore products from major markets, such as the United States, where iron ore is used in the production of steel. Steel production in the United States declined by 2.0 percent in 1989, however, the high price of scrap encouraged the use of iron ore as a source of iron units in steel production. Iron ore consumption in the United States during the first ten months of 1989 was 5.8 percent higher than during the same period in 1988. Other major markets for Provincial iron ore include Canada, Japan and West Germany. Steel production in Canada and Japan increased by 2.1 percent in 1989 compared to 1988, while steel production in West Germany was virtually unchanged from 1988. Employment at the IOCC and Wabush Mines totalled 2,410 persons during 1989 compared to 2,260 during 1988.

Newfoundland Zinc Mines shipped approximately 29,800 kilograms of zinc, valued at $64.4 million during 1989. This represents a decrease of 6.4 percent in volume but an increase of 22.4 percent in value compared to 1988 due to higher prices. The average price of zinc was US$0.7477 per pound in 1989, 33 percent higher than the 1988 average price of US$0.5622 per pound. Efforts to increase ore reserves at this operation were unsuccessful. A surface diamond drilling exploration program was completed in December but no new mineralization was discovered, hence, the mine is expected to close during the third quarter of 1990 as a result of depleted ore reserves. Employment averaged 150 persons in 1989, unchanged from employment in 1988.

MAP VII.2


EXPORTS OF MINERAL PRODUCTS FROM NEWFOUNDLAND & LABRADOR IN 1988 TO NON-CANADIAN MARKETS
UNITED STATES
EUROPE
32.5%
2.4%
0.6%
AFRICA
ASIA
11.4%
SOUTH AMERICA
AUSTRALIA

Source: Government of Newfoundland & Labrador.

Baie Verte Mines Inc., the sole producer of asbestos in the Province, shipped approximately 64,000 tonnes of asbestos, valued at $24.2 million in 1989. This represents an 11 percent decrease in the volume of shipments and a ten percent decrease in value. Shipments declined below 1988 levels for several reasons, including somewhat lower demand and the decision of some customers to consume inventories rather than maintain high inventory levels. This operation was temporarily shutdown from November 5, 1989 to November 20, 1989 due to unavailability of ore caused by rock slides in the mining pit. Approximately 115 employees were laid off during the shutdown. Construction of the wet processing plant is progressing and commissioning trials on the plant should begin in late February. The plant should be operational around mid-1990. Employment averaged 317 persons during 1989, compared to 347 in 1988.

Hope Brook Gold Inc. produced an estimated 85,000 ounces of gold during 1989, a 14.8 percent increase over 1988 levels. Employment at the operation also rose during the year, reflecting increased production. Approximately 270 persons were employed during 1989, compared to 210 in 1988. Production at this operation during the first half of the year was, however, lower than expected reflecting both lower than anticipated ore grades and lower quantities of ore processed during the period, and a mill shutdown during the first quarter. Operation of the gold mill was suspended from February 2 to March 8 to modify the effluent treatment system. The Company is currently making major modifications to the system; these modifications should be completed during the second quarter of 1990. Despite higher production levels, the Company reported losses of $8.6 million for the first three quarters of 1989 compared to net income of about $2.9 million in 1988. Losses have been attributed in part to lower gold prices. Gold prices averaged US$381 per ounce during 1989 compared to US$437 per ounce in 1988. Gold prices rebounded somewhat in the latter months of 1989, however, and the price of gold in December 1989, at US$409 per ounce, was the highest monthly price recorded during the year.

Shipments from St. Lawrence Fluorspar Limited totalled approximately 52,000 tonnes during 1989, an increase of 17.3 percent compared to 1988. The value of shipments also registered strong gains, growing by about 15.6 percent. Production at the mine, however, fell below targeted production for the year. This stemmed from the fact that production was constrained in the latter part of the year because of a shortage of ore available for processing. Employment at this operation averaged 114 persons during 1989 compared to 103 in 1988.

Output from the gypsum mine at Flat Bay, which is owned by Domtar Inc., increased substantially in 1989 compared to 1988; shipments totalled approximately 252,000 metric tonnes, an increase of 38 percent and employment averaged 37 persons compared to only 21 in 1988. The wash plant, which cleans the crushed gypsum, closed in mid-October for the annual shutdown and quarrying ceased during the first week of December. Overburden will be removed from the quarry during the winter. Quarrying is expected to resume in March and the wash plant will reopen about a month later.

Newfoundland Minerals Ltd., the only producer of pyrophyllite in Canada, is a year-round operation which normally employs 17 people. The Company produces from June to September and removes waste material from the site for the remainder of the year. The main market for the product is the United States where pyrophyllite is used in making ceramic tiles. The value of shipments from this operation increased slightly in 1989 compared to 1988.

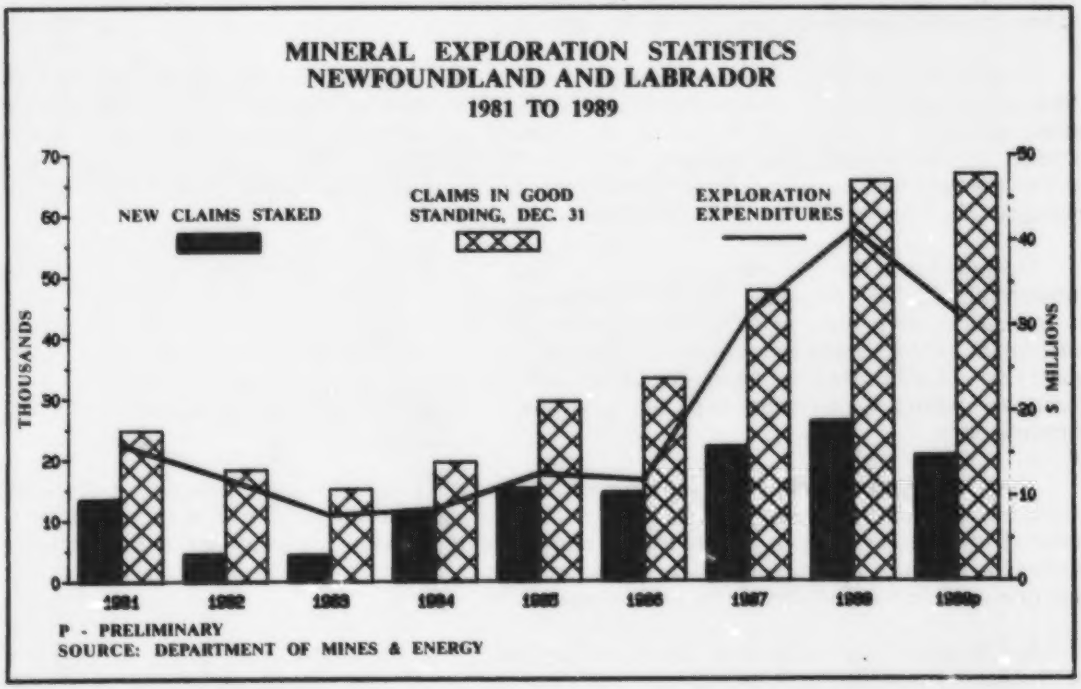
North Star Cement operates limestone and shale quarries near Corner Brook for use in the production of cement. The Company normally operates for an eight month period, with a scheduled closure occurring near the end of November. The quarries closed at the end of November 1989 and the kiln shut down during the first week of December. The quarries are expected to reopen in April 1990 and the kiln will start up about a month later. Output from this operation decreased slightly in 1989 compared to 1988 as a result of weaker markets. Shipments declined by about 2.8 percent and employment averaged 89 persons compared to 97 in 1988.

Trinity Brick Products Limited quarries shale on Random Island for the manufacture of brick at its plant in Milton. This seasonal operation began its regular shutdown near the end of September and is slated to resume operations in April 1990. Shipments declined 38.8 percent in 1989 compared to 1988 due to the postponement of major projects and work stoppages in the construction industry. Approximately 32 persons are employed at Trinity Brick during production.

Havelock Lime's agricultural limestone quarry in Cormack produces approximately 9,000 tonnes of limestone each year under contract for the Department of Forestry and Agriculture. Surplus production beyond that which is required by farmers in a given year is stockpiled for possible delivery in subsequent years. Due to a reduction in the amount of limestone required by farmers, shipments decreased from 6,333 tonnes in 1988 to 4,767 tonnes in 1989. This seasonal operation ceased production around mid-November and is scheduled to reopen during May 1990. Employment averages 4 persons during the production period.

The construction of a limestone aggregate processing operation at Lower Cove on the Port Au Port Peninsula was completed in 1989. The operation has a production capacity of four million tonnes of limestone aggregate per year. Quarrying and test production began late in 1989 and about 10,000 tonnes of unwashed material were produced during the fourth quarter. The facility is expected to be fully operational by April 1990 and full scale production of four million tonnes of limestone is anticipated by the end of 1992. Approximately 17 persons were employed by the Company at the end of 1989.

DIAGRAM VII.2



MINERAL EXPLORATION STATISTICS
NEWFOUNDLAND AND LABRADOR
1981 TO 1989

P - PRELIMINARY
SOURCE: DEPARTMENT OF MINES & ENERGY

Mineral exploration in the Province was maintained at a high level during 1989. The value of expenditures on mineral exploration is estimated at $31 million, down from the peak of $41 million in 1988, however, still quite high by historical standards. The number of claims staked in 1989 was 20,466 and the number of claims in good standing as of December 31, 1989 was 66,872. This compares with 26,199 new claims staked and 65,822 claims in good standing in 1988. Employment related to mineral exploration totalled approximately 600 persons in 1989.

As a result of the increased level of mineral exploration activity in recent years, there are many exploration projects located throughout the Province which have potential for future development; the locations of these projects are illustrated in Map VII.1. Some of the more advanced programs include the Tally Pond/Duck Pond discovery, the Rambler Joint Venture project, the Nugget Pond discovery and the Cape Ray gold deposit. There are also a number of other prospects under investigation.

The Tally Pond/Duck Pond discovery, announced in early 1987, is a high grade zinc/copper/lead/silver/gold deposit. Drilling to date indicates that reserves amount to approximately four million tonnes with an average grade of 3.53 percent copper, 1.05 percent lead, 6.62 percent zinc, 67.39 grams of silver per tonne and 1.02 grams of gold per tonne. An Environmental Impact Statement (EIS) has been submitted to the Minister of Environment and Lands. A production decision is not anticipated until the EIS has been approved; approval is expected in 1990.

The Rambler Joint Venture Group was formed to explore the former Rambler properties on the Baie Verte peninsula. This project involved the testing of tailings from a previous mining operation and exploration of the property for unmined reserves and new deposits. Unmined reserves at the Main Mine were estimated at 173,000 tons averaging 1.75 percent copper, 1.69 percent zinc, 0.37 ounces of gold per ton and 1.12 ounces of silver per ton. The Ming Mine is estimated to contain 500,000 tons of ore, grading 3.66 percent copper and 0.06 ounces of gold per ton. A new copper-gold zone, Ming West, has been discovered and exploration results indicate reserves of 110,000 tons grading 5.6 percent copper, 0.37 percent zinc and 0.069 ounces of gold per ton. Mineable reserves of the tailings are estimated at 1.28 million tons, grading 0.31 percent copper and 0.049 ounces of gold per ton.

The Nugget Pond discovery was made by Bitech Energy Resources Limited in the Betts Cove area on the Baie Verte Peninsula. Upon completion of a 20,000 metre diamond drilling program, the main zone deposit has been outlined and determined to contain reserves estimated at 514,000 tonnes grading 14.1 grams of gold per tonne. This reserve is thought to be sufficient to support a milling operation of 300 tonnes per day for about five years. Continued exploration work on this property is planned for 1990 and 1991.

The Cape Ray gold deposit is located near the headwaters of the Isle aux Morts river in southwestern Newfoundland. Dolphin Exploration Ltd. has spent approximately $14 million on this property over the last four years. The 1989 exploration program began in May and continued until November. The most recently announced reserves indicate a mineral inventory of 500,000 tons grading 0.294 ounces of gold per ton. In addition to this main zone, Dolphin has announced a new gold showing near the initial discovery. The zone is over 350 feet in length and assays of up to 0.45 ounces of gold per ton have been obtained in samplings. The Cape Ray project has been registered with the Department of Environment and Lands and the Company is required to submit an EIS. A feasibility study is currently underway. Upon completion of the feasibility study and approval of the EIS, a production decision could be made.

Marble deposits in the Roddickton - Croque area of the Great Northern Peninsula have been the focus of attention for two companies in particular. Aurion Minerals Ltd. and English China Clays America Ltd. hold the mineral rights on two calcium carbonate deposits at Coles Pond and Penny's Pond respectively. Both companies are obliged to make a production decision within three years or lose the mineral rights licenses in the area.

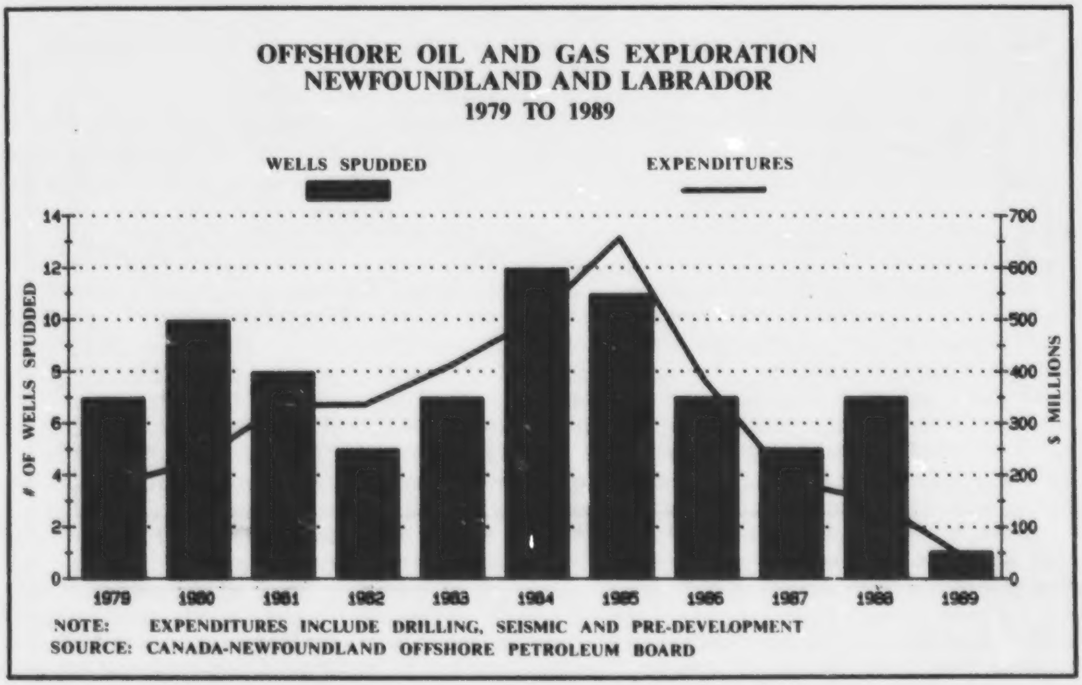
The outlook for the mining industry in 1990 is for continued growth. The total value of mineral shipments is projected to increase to over $1.0 billion as performance improvements are expected for most operations in the Province. Production of iron ore should approximate levels achieved last year as both the IOCC and Wabush Mines ran at capacity during 1989. Anticipated increases in prices of iron ore products should boost the value of iron ore shipments. Hope Brook Gold Inc., Baie Verte Mines, St. George's Gypsum, St. Lawrence Fluorspar, Trinity Brick and Havelock Lime are forecasting increases in the volume of shipments in 1990. Newfoundland Minerals and North

Star Cement expect shipments to approximate the 1989 level and shipments from the limestone operation on the Port Au Port Peninsula should begin in June 1990. The closure of the Daniel's Harbour zinc mine, expected in July 1990, is the only negative factor in the outlook for the Province's mining industry this year. Activity in mineral exploration should continue to be brisk throughout the year and exploration work on many major projects is expected to continue.

VIII. OFFSHORE OIL AND GAS EXPLORATION AND DEVELOPMENT

Exploratory drilling for hydrocarbons beneath the continental shelf off the coast of Newfoundland and Labrador, comprising an area of 1.6 million square kilometres, began in 1966. Since that time, there has been a total expenditure of approximately $3.7 billion on drilling, seismic and other work which has resulted in 20 significant discoveries of hydrocarbons. The Hibernia P-15 well was drilled in 1979, and the magnitude and quality of the Hibernia discovery prompted an intensive period of activity for the oil and gas exploration industry. The discovery, coupled with high world oil prices and the introduction in 1980 of Petroleum Incentive Program (PIP) grants, also provided substantial incentives to increase levels of offshore exploration activity. Between 1980 and 1985, exploration expenditures increased at an annual average rate of 23.4 percent, peaking at $646.0 million in 1985 (see Diagram VIII.1). Expenditures have decreased every year since then in response to a number of factors including lower world oil prices and the withdrawal of PIP grants in 1986.

DIAGRAM VIII.1



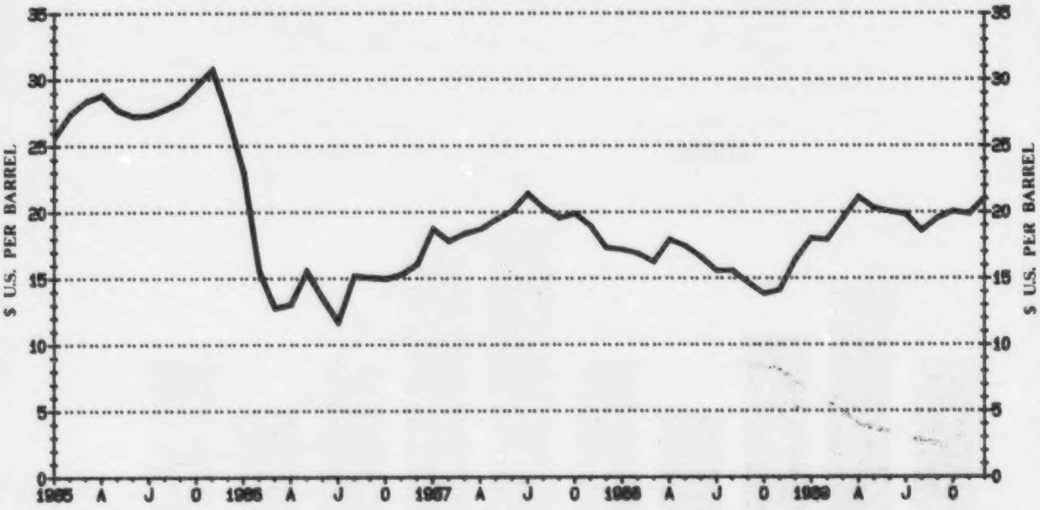
OFFSHORE OIL AND GAS EXPLORATION
NEWFOUNDLAND AND LABRADOR
1979 TO 1989

NOTE: EXPENDITURES INCLUDE DRILLING, SEISMIC AND PRE-DEVELOPMENT
SOURCE: CANADA-NEWFOUNDLAND OFFSHORE PETROLEUM BOARD

The price of West Texas Intermediate light crude oil (a North American benchmark price), which remained at levels in excess of US$30 per barrel during the first half of the decade, collapsed late in 1985 (see Diagram VIII.2). Prices recovered through to mid-1987, however, downward pressure on prices throughout 1988 resulted from the Organization of Petroleum Exporting Countries' (OPEC) inability to control member countries' level of oil output coupled with slow growth in world demand for crude oil. In addition, production from non-OPEC sources has increased in recent years thus further adding to world oil supplies. Oil prices declined steadily from their mid-1987 peak, except for a short rally in early 1988, and bottomed out at US$13.75 in October 1988. In response to an agreement on production quotas for OPEC member countries reached in November 1988, however, the price of oil increased steadily, peaking at US$21.14 per barrel in April 1989. Prices dropped slightly to a level of US$18.58 in August as production by OPEC and North Sea producers increased, but were generally stronger throughout the remainder of the year, closing at US$21.09 per barrel in December. The average price was US$19.66 per barrel during 1989, up 23 percent from 1988. Improved prices in 1989 were attributable to several factors including the interruption of supply from some sources and stronger world demand for petroleum products. Crude oil supplies from both North Sea and Alaskan sources were interrupted during the first half of 1989 resulting from accidents at both sites. This interruption in world oil supply put upward pressure on prices during the first half of the year. As well, demand was higher than expected, particularly in newly industrialized countries and the United States. Unseasonably cold weather in the latter part of 1989 contributed to increased demand for heating oil in North America. Prices remained firm throughout the second half of 1989 despite high levels of OPEC crude oil production and a resumption in production from Alaskan and North Sea sources in the third quarter, reflecting strong world demand.

DIAGRAM VIII.2

WEST TEXAS INTERMEDIATE LIGHT CRUDE OIL
MONTHLY AVERAGE SPOT PRICE AT CUSHING, OKLAHOMA
1985 TO 1989



SOURCE: ENERGY, MINES AND RESOURCES CANADA, CRUDE OIL PRICING REPORT

The Canadian oil and gas exploration and production industry performed poorly in 1989 even though oil prices were higher, on average. The total number of exploration and development wells drilled numbered 5,454 with about 6.3 million metres drilled in 1989, down by 39.0 and 38.6 percent respectively from 1988. This represented the lowest level of activity in Canada since 1976. The downturn in 1989 drilling activity was precipitated by lower oil and gas prices in the previous year which eroded producer profit margins. In addition, the Canadian industry has undergone an extended period of reorganization characterized by corporate mergers and acquisitions and the need to fend off unwanted takeover bids. Drilling was also affected by high Canadian interest rates which have resulted in increased financing costs for exploration and production activities, and a strong Canadian dollar which negatively impacted revenues derived from exports to the United States.

The poor performance of the Canadian industry was reflected by a decrease in exploratory drilling off the Province's east coast. During 1989, there was one carryover well drilled and one well spudded, both of which were drilled to completion, providing nearly four rig months of activity. This compares to seven wells spudded and two carry over wells drilled in 1988, which generated about 18 rig months during the year. With only two wells drilled to completion and an absence of any offshore drilling activity during the last seven months of the year, 1989 represented the lowest level of activity since 1977. Exploration expenditures, which include seismic and other related activities (usually less than one percent of exploration expenditures) but exclude predevelopment expenditures, totalled $30.6 million, down substantially from the $136.4 million spent in 1988.

Texaco Canada Resources Ltd. was the only operator to drill on the Grand Banks during the year. The Company entered into an agreement with Husky Oil Ltd. during 1988 which allowed them to earn a working interest in some Husky controlled acreage by carrying out exploratory drilling. Texaco has fulfilled its commitment under this agreement by drilling exploratory wells on the Merasheen, Amethyst and Springdale prospects, completing the latter two in the first half of 1989; Texaco decided to forego its option of drilling one or two additional wells.

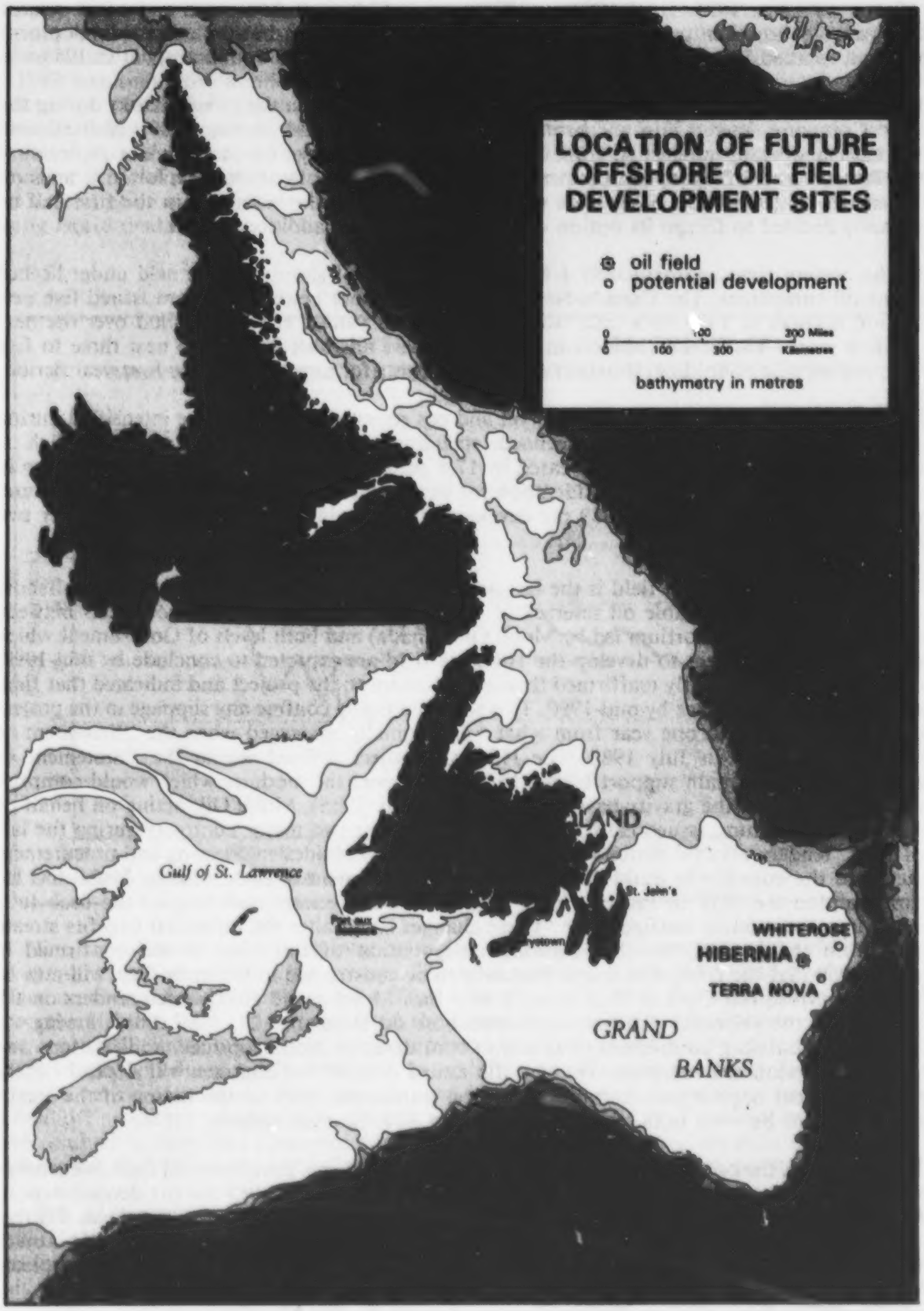
At the present time approximately 1 million hectares of offshore area are held under licence by various oil companies. The Canada-Newfoundland Offshore Petroleum Board issued five new Exploration licences in 1989 with total work commitments valued at $49.7 million over the next three to five years. The licence holders must drill at least one well during the next three to five years, depending on the holding, to retain exploration rights for a second three to four year period.

Interest in the development of offshore oil and gas reserves in the Province intensified during 1989. While exploration expenditures declined, spending on pre-development activities (such as engineering feasibility studies, etc.), increased by 17.8 percent to reach an estimated $18 million in 1989. The three large fields under consideration for development are the Hibernia, Terra Nova and Whiterose prospects; the bulk of 1989 pre-development expenditures focused on the former two projects.

The Hibernia offshore oil field is the largest discovery to date in the Newfoundland offshore area, with estimated recoverable oil reserves of 525 to 650 million barrels. Negotiations between industry (the Hibernia consortium led by Mobil Oil Canada) and both levels of Government which would see a final agreement to develop the Hibernia field are expected to conclude by mid-1990. To this end, all parties recently reaffirmed their commitment to the project and indicated that final agreements should be in place by mid-1990. This schedule would confine any slippage in the project construction time table to one year from what was originally envisaged when the "Statement of Principles" was signed in July 1988. The Hibernia project defined within the "Statement of Principles" included a main support frame (MSF) to support the modules which would comprise the topsides and sit on the gravity-based concrete platform (GBS). Mobil Oil, acting on behalf of the Hibernia consortium, issued calls for tenders on the first two major contracts during the last half of 1988. Tenders were submitted for the project services, topsides engineering and procurement contract, and the contract to build the GBS in 1989. Subsequent re-evaluation by Mobil has led them to abandon the MSF in favour of the "supermodule" concept that will see the deck fully integrated into the module configuration. These changes could alter the industrial benefits stream accruing from the project, thereby requiring renegotiation of this item. Mobil confirmed in December 1989 that the GBS, which was originally to be constructed in Placentia Bay, will now be built at Great Mosquito Cove in Bull Arm, Trinity Bay. Mobil called for updated tenders on the construction of the Hibernia platform's concrete base on December 22, 1989 thus allowing the consortium and building contractors to take into consideration recent topsides modifications and the new construction site location. The specific award date of the contract will depend on the outcome of current negotiations between all project proponents, and on the timing of the legally binding agreement between both levels of government and the consortium.

Petro Canada, the operator for the estimated 400 million barrel Terra Nova oil field, is currently reviewing the results of a preliminary engineering study completed in 1989 for the development of the field. The study evaluated two floating production system options for the field. Further geological and reservoir evaluation studies are underway, after which a decision will be made concerning the submission of a development plan to the Canada-Newfoundland Offshore Petroleum Board in 1990.

MAP VIII.1


LOCATION OF FUTURE OFFSHORE OIL FIELD DEVELOPMENT SITES
oil field
potential development
0
100
200 Miles
0
100
200
Kilometres
bathymetry in metres
300
200
Gulf of St. Lawrence
LAND
St. John's
Port aux Basques
ystown
200
WHITEROSE
HIBERNIA
TERRA NOVA
GRAND BANKS

Husky Bow Valley, the operator for the Whiterose oil and gas field, completed a delineation drilling program in 1988. The successful Whiterose E-09 well tested significant amounts of oil in a thick, continuous reservoir within a single formation with an estimated possible recoverable oil accumulation of 200 to 300 million barrels. The operator has stated that Whiterose, lying beneath 124 metres of water, is a candidate for future development utilizing a floating production system. More delineation drilling, however, is required to determine the extent of the reservoir.

The western portion of the Island of Newfoundland within the Humber Zone has long been recognized as an area of petroleum potential, however, due to a variety of logistical and geological reasons, very little exploration has occurred in this area. Approximately 60 shallow subsurface wells have been drilled to date onshore Newfoundland, the first of which was completed in 1867. Some minor production was achieved in the early 1900s. Despite the fact that these wells were drilled without the benefit of any geophysical data and very few had any geological control, more than half of them encountered some form of hydrocarbon. In 1989, an Interim Permit was granted under the Petroleum and Natural Gas Act which led to the acquisition of 62 kilometres of seismic data. This program is significant in that it is the first time seismic data has been used to purposefully evaluate onshore petroleum potential in the Province. The results of this work may lead to follow-up seismic programs, which may in turn lead to the drilling of subsurface structures identified by the seismic surveys.

The outlook for the oil and gas industry in the Province during 1990 is for general, overall improvement. The price of West Texas Intermediate light crude oil is expected to average over US$19 per barrel contingent upon the ability of OPEC to maintain control of production levels within all member countries during the year and upon continued strength in world oil demand. Higher prices in 1989 should see more funds available for Canadian oil and gas exploration activities in 1990. Exploration activity should increase as the Chairman of the Canada-Newfoundland Offshore Petroleum Board estimates that several wells could be drilled this year. Petro Canada has confirmed its intention to drill an exploratory well in close proximity to the Terra Nova discovery well. Further drilling of an additional one to three wells may take place as current holders of Exploration Licences meet work commitments of their licences. The Hibernia development project should receive final approval by all proponents in mid-1990, which could lead to construction commencing before the end of the year. A decision pertaining to the development of the Terra Nova field could also be forthcoming during the year. In addition, further interest in the potential of the west coast for hydrocarbon production could lead to increased levels of seismic survey activities, and perhaps some exploratory drilling in the near to medium term.

IX. SELECTED MANUFACTURED PRODUCTS

The manufacture of products other than fish and newsprint accounted for 32.4 percent of Gross Domestic Product (GDP) in the Province's manufacturing industry during 1987 and 3.4 percent of total GDP. Employment in this component of the manufacturing industry averaged about 6,000 persons a month in 1988, an increase from 5,400 in 1987. Due to the seasonal nature of some of these manufacturing activities, however, the number of workers who are employed by these manufacturers for some part of the year is understated by monthly average employment statistics. The table below highlights some of the products manufactured in the Province.

Many of the products manufactured are consumed within the Province, however, certain products are exported to national and international markets. Some of these manufacturing activities offer significant potential for future economic growth, particularly in relation to the development and production of offshore oil and gas. What follows is a brief discussion of selected products which are manufactured in the Province.

TABLE IX.1

SELECTED MANUFACTURED PRODUCTS
NEWFOUNDLAND AND LABRADOR, 1989

Fabricated Metal Products

- Fabricated & Structural Metal
- Boilers & Heat Exchangers
- Ornamental & Architectural Metal Products
- Machine Parts & Equipment

Wood Products

- Lumber, Rough & Dressed
- Sash, Door & Other Millwork
- Furniture & Fixtures
- Veneer & Plywoods

Transportation Equipment

- Shipbuilding & Repair
- Boatbuilding & Repair

Chemical & Chemical Products

- Industrial Inorganic Chemical Products
- Paint & Varnish (Coatings)

Food & Beverage Products

- Meat & Poultry Products
- Dairy Products
- Bakery Products
- Soft Drinks
- Breweries

Non-Metallic Mineral Products

- Cement
- Ready Mix Concrete

Leather & Allied Products

- Footwear
- Furriers

Textile Products

- Clothing

Refined Petroleum & Coal Products

Source: Standard Industrial Classification (1980); Economic Research and Analysis Division, Cabinet Secretariat.

IX.1 Marystown Shipyard Limited

The Marystown Shipyard experienced a mixed performance during 1989, operating at high levels during the early part of the year and subsequently slowing down as the year progressed. Both new vessel construction and routine repair work were down significantly, on average, from the levels attained in 1988, a year when the Shipyard was extremely busy. The difficulties at the Shipyard were primarily related to the downturn in the fishing industry (see Section V). The lack of offshore oil and gas related contracts at the Cow Head rig repair facility also adversely affected operations as the facility was idle throughout the year.

The Shipyard had a high level of new vessel construction activity during the first half of the year. Work was completed for Fishery Products International on three stern trawlers which were delivered in February, April and June respectively. This brought the total to five vessels completed for FPI under the original eight vessel agreement initiated in 1987. Reductions in FPI's groundfish quotas in 1989, coupled with anticipated further cuts for 1990, forced the Company to re-evaluate its capital expenditure program. As a result, the Company decided to forego construction of the remaining three vessels, and to retire 12 existing trawlers which had represented significant repair and maintenance work for the Shipyard in the past. In addition to the FPI work, two middle distance trawlers were completed for the Department of Fisheries, one in April and the other in July.

The Shipyard was not awarded any major new contracts until the end of the first half of 1989. The first contract was for the construction of a ferry for the Bell Island service. This contract, valued at $13.6 million, commenced in mid-August and is scheduled for completion by August 1990. The contract is expected to generate about 80 person years of employment. The Shipyard was awarded a second large contract for the modernization of the Coast Guard vessel Provo Wallace on September 25, 1989. Work on the contract, valued at $10.6 million, commenced in October 1989 and will take about one year to complete; the contract will also generate employment for about 80 persons.

Employment at the Shipyard declined steadily from about 600 persons in January to a low of approximately 250 in August as new vessel construction contracts carried over from 1988 were completed. Employment remained at a level of about 275 persons from mid-August through to the end of 1989, and then rose to about 350 early in 1990 as work proceeded on the Bell Island ferry and Provo Wallace contracts.

The outlook for Marystown Shipyard in 1990 is for a mixed performance. New vessel construction and repair work for the fishing industry will be constrained by the downturn in the fishery. The Shipyard, however, has received approval in principle under the Canada-Newfoundland Offshore Development Fund for the construction of a $36.5 million offshore fabrication facility at the Cow Head rig repair facility site. Pending final Federal approvals, detailed engineering work could commence in the spring of 1990, with construction to begin in tandem with the release of the Hibernia project. This investment would allow the Shipyard to compete for oil and gas related offshore fabrication opportunities on the Hibernia and other projects, and would broaden the scope of marine related fabrication work that the Company could undertake.

IX.2 Come By Chance Oil Refinery

The Come By Chance oil refinery was reactivated in September 1987 and is operated by Newfoundland Processing Limited, a subsidiary of Newfoundland Energy Limited. The refinery operated between 70 and 90 percent of its rated throughput capacity of 105,000 barrels per day in 1989, employing just under 600 persons, of which 250 were permanent workers. Crude oil for the refinery is imported mainly from North Sea sources and the products are exported primarily to markets in the eastern United States, although some products are consumed domestically. There were more than 25 million barrels of crude oil processed at the refinery in 1989, bringing the total processed to over 54 million barrels, with an estimated value in excess of $1 billion, since reactivation in 1987.

The refinery underwent a major maintenance program, between September 8 and October 19, 1989. While the refinery was closed for the program, employment peaked at about 800 persons as extra people were hired to carry out the necessary maintenance. The refinery was back in full operation by the end of October, running at higher rates than before the program.

Newfoundland Processing Limited continued its capital investment program in 1989 with over $15 million allocated for capital expenditures. Work on the Hydrogen Unit, which is designed to produce hydrogen at 96 percent purity, was completed early in 1990. This unit feeds hydrogen into the Isomax or Hydrocracking unit which upgrades heavier gas oils by cracking them into lighter fuels such as gasoline and jet fuel. The process results in a higher yield of refined products per barrel of crude oil and also allows the refinery the flexibility of modifying production schedules to meet seasonal fluctuations in specific product demand. The Isomax unit became operational in September 1988, while the Hydrogen plant became fully operational by the end of January, 1990. The refinery is expected to operate at or near its rated throughput capacity during 1990.

Come By Chance Marketing, a division of Newfoundland Processing Limited, is selling furnace oil, diesel fuel, unleaded gasoline and other petroleum products to customers within the Province. The Company purchased land in Donovan's Industrial Park in the latter part of 1989 for the purpose of storing petroleum products. This storage facility will enable the company to become a more effective competitor in the St. John's area by improving product availability and thus reducing delivery time to customers. Six independent operators on the Island are engaged in distributing products from Come By Chance Marketing to local customers, particularly on the east coast of the Island. The marketing division has been awarded several contracts in 1989 including two furnace oil supply contracts with the City of St. John's and the Avalon Consolidated School Board. Come By Chance Marketing is actively engaged in pursuing further marketing opportunities which would enable them to increase local consumption of refined products from the refinery.

The outlook for the refinery moving into the 1990s is positive. The activation of the Hydrogen plant will increase Newfoundland Processing Limited's yield from each barrel of crude oil, and will improve the Company's ability to meet seasonal fluctuations in refined product demand. Aggressive marketing by Come By Chance Marketing Limited should also see the volume of refined products consumed domestically increase, particularly as the cost competitiveness of these products in local markets improves.

IX.3 Albright and Wilson Americas

Albright and Wilson Americas, a division of Tenneco Canada Ltd., terminated operations at its Long Harbour phosphorus plant on August 5, 1989. The facility was closed because the plant had become technologically obsolete and could not market its products cost effectively. In response to the situation, the Province formed a Ministerial Committee to assess the Company's position and seek alternate site uses. The Province commissioned a study by Hatch Associates of Toronto in 1989 which confirmed that the plant could not continue to operate competitively. The study also delineated several alternative options for the site.

The consultant's report indicated that the site could support a facility to produce ferro manganese and ferro silicon products used in the high tech electronics industry. This option was considered unviable at this time due to the uncompetitive nature of the operation and conditions relating to power quantity and cost requirements. It was also determined that a waste disposal facility could be developed, and towards this end, a proponent has submitted a formal proposal to the Province. The proponent is currently conducting a detailed feasibility study which should be completed by mid-1990. Another potentially viable option for the site is a stone/slag aggregate crushing operation. Two proponents are currently negotiating with Albright and Wilson Americas to acquire control of the stone crushing equipment and assets. One proposes to operate a stone and slag aggregate crushing operation, while the other is opting for a slag aggregate process; both intend to export products to the United States.

The Minister of Environment and Lands has ordered that the Company's project to clean up and restore the site must undergo Environmental Assessment. As such, planning for the larger and more complex portions of the site restoration project is ongoing, involving Government and Company officials. In the interim, limited clean-up activity is proceeding. Approximately 30 employees of the former operation have been retained to clean up stored materials containing recoverable amounts of phosphorus, a process which could extend for five to ten years.

IX.4 Newfoundland Dockyard Corporation

The Newfoundland Dockyard, which was established in 1884, is a major player in the ship repair industry in the Province. The dockyard was incorporated as a subsidiary of Marine Atlantic on March 31, 1987 and its facilities now include a graving dock and syncrolift. The Dockyard provides complete ship repair service including hull repairs, sandblasting, painting and machine shop work.

The Dockyard recorded a favourable performance during 1989. Employment varied between a low of 90 and a high of 500 persons throughout the year, generally above levels experienced in 1988 when the number of workers fluctuated between 157 and 278 persons. A total of 38 contracts were received during 1989 which were valued at $17.5 million. In 1988, 83 contracts were received but the value of these contracts was only $13.1 million.

One of the more significant contracts at the Dockyard during 1989 was a mid-life refit of the Department of Fisheries and Oceans' vessel, the Hudson, valued at $9 million. The work on this contract lasted from January to mid-October and employed over 300 people.

The Dockyard is seeking funding in 1990 for facility enhancement. If successful, the Corporation plans to modernize and expand the yard to enable it to handle larger contracts.

X. CONSTRUCTION

The construction industry is a major component of the Province's goods producing sector. Activity in this industry accounted for 25.3 percent of Gross Domestic Product (GDP) in the goods producing sector in 1987 and about 9.4 percent of total GDP. The Province's construction industry is comprised of approximately 2,500 establishments with about 90 percent of these firms employing less than 20 people.

The construction industry, which is seasonal in nature, provided full-year and part-year employment in 1989 amounting to 11,000 person years, equivalent to the level achieved in 1988. Employment in construction traditionally peaks during the summer months and in 1989 employment ranged from a low of 7,000 in February and March, to a high of 15,000 in August and September. Wages and salaries in the construction industry grew by 8.1 percent (4.3 percent in real terms) to $169.1 million during the first ten months of 1989 despite work stoppages in the second half of the year.

Work stoppages occurred during the third quarter of 1989 as a result of separate labour disputes between electricians, ironworkers and their respective employers. A dispute involving a local of the International Association of Bridge, Structural and Ornamental Iron Workers concerning wages lasted from July 17 to September 27. This dispute was resolved with a negotiated monetary package. The other dispute involving an International Brotherhood of Electrical Workers' local began on July 20 and focused on the level of union input into hiring. The electricians returned to work on September 5 with both employers and employees agreeing to establish a committee of six knowledgeable industry representatives to resolve the issue.

The value of permits issued by selected municipalities in the Province for both residential and non-residential building construction rose by 8.1 percent in 1989 to almost $220 million (see Table X.1). Large increases in residential and commercial/industrial permits offset declines in institutional/government permits. Building permit values for residential and commercial/industrial construction grew by 22.1 and 31.5 percent respectively in 1989. Some of the projects which contributed to the growth in commercial/industrial permit values included the construction of hotels, office and warehouse space, and retail facilities. Building permits issued for institutional and government buildings totalled $20 million in 1989, about half the amount recorded in 1988. Although declines were experienced in this category by each of the six municipalities during 1989, the overall reduction was largely due to a drop in permits approved in St. John's and Conception Bay South. These two municipalities issued building permits for a number of sizeable projects in 1988 which caused strong growth in the value of institutional/government permits for that year. Projects such as the new head office of Newfoundland and Labrador Hydro resulted in growth in permit values in St. John's while school construction projects were responsible for the increase in Conception Bay South. The absence of projects such as these in 1989 resulted in much lower values than in the previous year.

The residential sector of the construction industry continued to post strong growth in 1989 as housing starts reached their highest level since 1980. Starts numbered 3,536 last year, an increase of 11.6 percent compared to 1988. Gains were attributable to increased construction activity in urban centers (populations of 10,000 and over). Starts in urban centers, which accounted for about 60 percent of total starts in 1989, increased by 25.8 percent, offsetting a decline of 5.1 percent in rural areas (populations of less than 10,000). New residential activity in urban centers was up substantially in each quarter of 1989, a sharp contrast to new home construction trends in rural areas. Housing starts in rural areas, on a comparative quarter-over-quarter basis, rose in the first quarter of 1989, but fell in each subsequent quarter.

TABLE X.1

SUMMARY OF BUILDING PERMITS ISSUED AND THEIR ASSOCIATED CONSTRUCTION VALUE SELECTED MUNICIPALITIES, 1989

	Corner Brook		Grand Falls		Gander		Mount Pearl		Conception Bay South(1)		St. John's		**Total**	
	1989 # Permits	1989 $ (000's)	1989 # Permits	1989 $ (000's)	1989 # Permits	1989 $ (000's)	1989 # Permits	1989 $ (000's)	1989 # Permits	1989 $ (000's)	1989 # Permits	1989 $ (000's)	1989 # Permits	1989 $ (000's)
Commercial	*	*	19	3,042 (19.2%)	60	9,098 (147.9%)	58	7,731 (77.4%)	53	462 (-57.3%)	*	*	*	*
Industrial	*	*	8	509 (-41.6%)	1	150 (n.a.)	10	7,440 (116.2%)	2	0 (n.a.)	*	*	*	*
Subtotal	**125**	**5,523** (-5.0%)	**27**	**3,551** (3.7%)	**61**	**9,248** (152.0%)	**68**	**15,171** (94.5%)	**56**	**462** (-57.3%)	**836**	**42,106** (16.9%)	**1,172**	**76,060** (31.5%)
Residential	818	11,661 (1.4%)	289	8,100 (97.2%)	374	6,969 (70.8%)	585	20,522 (-19.5%)	545	12,240 (2.1%)	2,262	63,893 (45.5%)	4,873	123,385 (22.1%)
Institutional and Government	9	255 (-9.7%)	4	1,850 (-12.8%)	12	653 (-78.2%)	2	163 (-41.3%)	1	0 (-100.0%)	52	17,413 (-37.5%)	80	20,333 (-54.1%)
GRAND TOTAL	**952**	**17,439** (-0.9%)	**320**	**13,500** (39.9%)	**447**	**16,870** (57.0%)	**655**	**35,856** (6.8%)	**601**	**12,702** (-46.8%)	**3,150**	**123,412** (14.5%)	**6,125**	**219,778** (8.1%)

Notes: (1) While the number of permits reflect the total issued in each category, the estimated value includes only new building construction. Renovations, extensions, or other improvements are not included in the values provided.

The sum of the components may not equal the total due to rounding. Figures in parentheses refer to percentage change from the same time period in 1988.

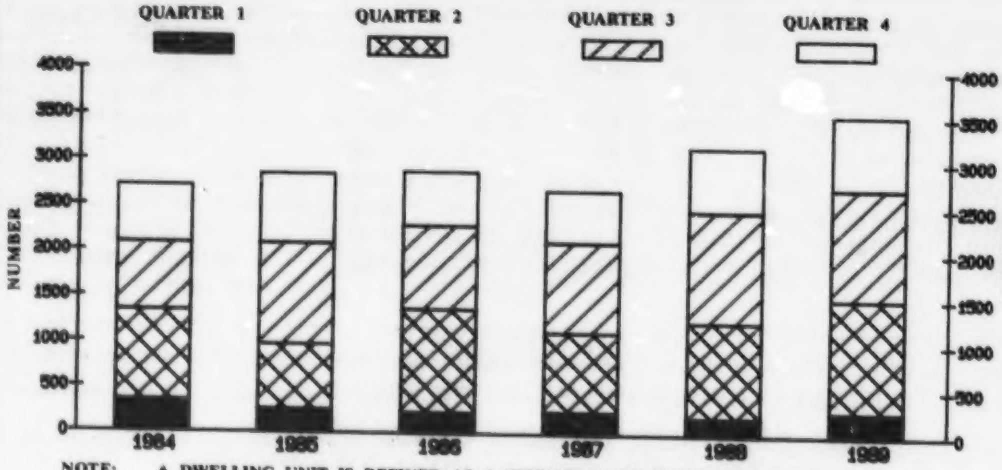
n.a.: Not applicable since the value of permits in 1988 was zero.

*: Commercial and industrial are combined.

Source: City/Town Councils of Corner Brook, Grand Falls, Gander, Mount Pearl, Conception Bay South and St. John's; Economic Research & Analysis Division, Cabinet Secretariat.

DIAGRAM X.1

DWELLING STARTS
NEWFOUNDLAND AND LABRADOR
1984 TO 1989



NOTE: A DWELLING UNIT IS DEFINED AS A STRUCTURALLY SEPARATE SET OF LIVING QUARTERS WITH A PRIVATE ENTRANCE

SOURCE: CMHC HOUSING STATISTICS

Construction of both single detached and multiple unit dwellings increased in 1989: housing starts by type of structure are contained in Table X.2. Construction of single detached houses, which comprises the largest portion of new residential activity, increased by 3.3 percent to 2,932 units. Growth in this category, however, was restricted to urban areas of the Province. Starts in urban centers increased by over 11 percent to offset a decline of nearly seven percent in rural areas. New construction of structures such as semi-detached, row and apartment units, commonly referred to as multiple starts, totalled 604 in 1989, an increase of 83.6 percent over 1988. Multiple starts increased in both urban and rural areas with the bulk of the activity concentrated in urban centers. Growth in the construction of multiple units can be attributed to work carried forward from Federal/Provincial assisted housing commitments in 1988, increased investment in private multiple unit construction and an amendment in policy by Canada Mortgage and Housing Corporation (CMHC) regarding unit classification in the *Starts and Completions Survey*. Prior to the amendment of the survey in 1989, a single detached unit with a self-contained basement apartment was counted as one single unit. Beginning in 1989, this type of structure was counted as a duplex (two units) and classified under the apartment and other category. The survey change resulted in an increase in the number of starts in the apartment and other category, and to a lesser extent, a reduction in the number of single detached starts. It is estimated that the survey change accounted for close to a third of the increase in housing starts for 1989. Even without the survey amendment last year, Provincial housing starts were at their highest level since 1980. It should also be noted that this survey change is applicable to completion and under construction data.

TABLE X.2

HOUSING STARTS BY TYPE OF DWELLING NEWFOUNDLAND AND LABRADOR, 1988 AND 1989

Dwelling Type	1988	1989	Percent Change
Single detached	2,839	2,932	3.3
Multiple	329	604	83.6
Semi-detached	101	98	-3.0
Row	33	53	60.6
Apartment & Other (1)	195	453	132.3
Total	**3,168**	**3,536**	**11.6**

Note: (1) Other includes duplexes, double-duplexes, triplexes, row-duplexes and dwellings over, or at the back of, a store or other non-residential structure.

Source: Canada Mortgage and Housing Corporation; Statistics Canada catalogue 64-002; Economic Research and Analysis Division, Cabinet Secretariat.

The strong growth in the number of new homes started in 1989 was met with large increases in the volume of homes completed, resulting in a decline in the amount of dwellings under construction. Completions rose by 17.5 percent in 1989, to 3,783 units, their highest level since 1981. This strong growth in completions caused the number of dwellings under construction at the end of December to fall by 9.3 percent from December 1988, to a level of 3,168 units. Completions rose in urban and rural areas by 22.5 and 11 percent respectively, while the number of dwellings under construction in these areas at the end of the year fell by 5.7 and 11.3 percent.

Construction investment expenditures are estimated to have grown by 1.5 percent last year according to the latest Statistics Canada survey of investment intentions, (see Overview of Economic Conditions, Table III.2). Residential construction expenditures are estimated to have grown by 10.5 percent in 1989 compared to the previous year. Non-residential spending activity, on the other hand, is estimated to have declined by 3.1 percent. Declines in non-residential construction activity were due, in large part, to decreased expenditures by the primary and construction industries reflecting lower offshore oil and gas exploration expenditures. There were, however, many large projects which generated substantial non-residential construction activity during 1989. These projects, as well as new projects scheduled to commence in 1990, are outlined in Appendix 2 - *Inventory of Major Projects in Newfoundland and Labrador.*

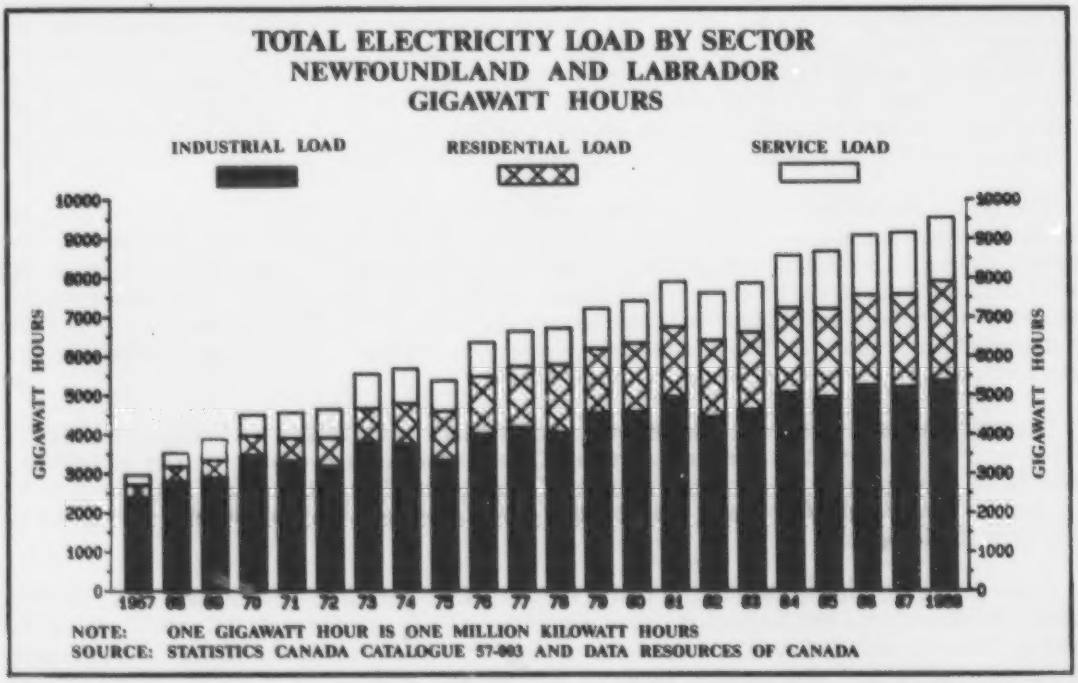
The construction industry is expected to experience increased activity in 1990 as a final agreement to develop the Hibernia oil field is anticipated by mid-year followed by a start of construction activity in the latter part of the year. Housing starts, which experienced robust growth for two consecutive years, are forecast to decline in 1990, however, it is anticipated that the decline in housing starts would have been larger this year if it were not for the proposed 1991 Goods and Services Tax (GST). Some individuals who are planning to construct new houses in the Province are expected to do so prior to the implementation of the GST in 1991. Total investment expenditures are expected to grow by 7.8 percent in 1990 due to increased spending on machinery and equipment, and on construction.

XI. ELECTRIC POWER

The electric power industry, which accounted for 15.6 percent of GDP in the goods producing sector and 5.8 percent of total GDP in 1987, encompasses both the production of electrical energy and its distribution to the end user. The dominant firms in this industry are Newfoundland and Labrador Hydro, a Provincial crown corporation and Newfoundland Light and Power Company Limited (NewLight), a private corporation. Newfoundland and Labrador Hydro generates most of the electrical output of the Province and sells power to retailers and the Province's large industrial users such as mining companies, pulp and paper mills and the oil refinery at Come By Chance. NewLight supplies electricity to the majority of residential and service customers on the Island. Employment in the electric power industry in 1989 was approximately 2,700 persons.

Since electricity is used as an input into the productive activities of all industries, the performance of this industry is closely linked to that of the overall economy. Electricity demand depends to a large extent on the productive activities of the mining and manufacturing industries, the stock of residential and non-residential buildings and the trend toward increasing reliance on electricity for heating purposes.

DIAGRAM XI.1



NOTE: ONE GIGAWATT HOUR IS ONE MILLION KILOWATT HOURS
SOURCE: STATISTICS CANADA CATALOGUE 57-003 AND DATA RESOURCES OF CANADA

Total electricity load has increased considerably over the past 20 years, as is illustrated in Diagram XI.1. Historically, the industrial load has accounted for the largest proportion of the total load, however, this proportion has been decreasing over time as the residential and service sectors have grown at a faster rate than the industrial sector. The utility load (residential and service) grew at an annual average rate of 10.0 percent from 1967 to 1988 compared to the industrial load which grew at 3.8 percent over the same period.

Total Provincial load increased about 1.8 percent in 1989. Electricity consumption increased by 2.2 percent and 0.5 percent respectively for the Island and Labrador. The growth on the Island is attributable to increased demand from the residential and service sectors. Electricity demand by industrial users on the Island declined because of the closure of the Long Harbour phosphorus plant in August 1989, however, demand actually increased for the other industrial users reflecting sustained operations. The increased demand in Labrador was the result of load growth of 6.1 percent in Labrador East, reflecting increased economic activity in this region which encompasses the rapidly expanding town of Happy Valley-Goose Bay.

Increased sales were recorded by both Newfoundland and Labrador Hydro and NewLight in 1989. The volume of electricity sold by NewLight grew by 6.8 percent due to increases in consumption of electricity by all sectors. Increased consumption is attributable to several factors including a continued high installation rate of electric heat in all sectors, colder than normal temperatures and continued expansion in the economy.

Electricity prices were relatively stable throughout 1989. Hydro's rates to utility customers decreased marginally in the second half of the year while industrial rates increased slightly in 1989. NewLight's electricity rates to customers declined slightly in the second half of the year as a result of adjustments related to the Rate Stabilization Plan.

Capital expenditures in the electric power industry increased in 1989. Newfoundland and Labrador Hydro increased expenditures by about 4.6 percent to $84.9 million. Major projects carried out included construction work on their head office and energy control centre in St. John's, the hydroelectric facility at Paradise River and the wood-chip generating station at Roddickton, the upgrading of the Holyrood oil fired generating station, and the construction of transmission lines from Sunnyside to Salt Pond and from Berry Hill to Daniel's Harbour. Capital expenditures at NewLight increased by 20.8 percent to $56.3 million in 1989. These expenditures included construction of a new regional office, warehouse and service facility for St. John's, improvements to computer systems and upgrading of an extension to the transmission and distribution system.

The Power Distribution District of Newfoundland and Labrador (PDD), a statutory corporation of the Province whose affairs were administered by Newfoundland and Labrador Hydro, supplied electricity to customers in rural areas of the Province. In June 1989, the Provincial Government announced the phase out, over a three year period commencing in 1989, of the subsidy paid to Newfoundland and Labrador Hydro for the operation of the PDD. Subsequently, the PDD was dissolved on January 1, 1990 and customers who were previously serviced by the PDD are now being serviced by Newfoundland and Labrador Hydro.

Negotiations have been ongoing between the Province and Quebec with respect to possible development of hydroelectric sites in Labrador. Development of a hydroelectric site in Labrador would be of enormous economic benefit to the Province, enabling it to capture both the benefits of a large construction project and the benefits of a long-term stream of reliable hydro-electric power at a stable price.

Capital expenditures in the electric power industry are expected to be sustained at a high level in 1990. Newfoundland and Labrador Hydro expects to spend approximately $97 million on capital projects. Construction will continue on the Company's new head office and energy control centre and on generation and transmission facilities throughout the Province. Capital expenditures by NewLight are expected to increase by 20.8 percent to $68.0 million. (For more details on these and other major projects see Appendix 2.)

Newfoundland and Labrador Hydro is proposing to increase its rates to utility and industrial customers in 1990. These rate increases are deemed necessary primarily because of increased costs resulting from the Provincial Government's elimination of the PDD subsidy and imposition of an annual one percent guarantee fee based on the long term outstanding debt of the Company. NewLight's electricity rates will also increase in 1990. Effective February 1, 1990, the basic customer charge increased from $10.35 to $13.29 and the average price of a kilowatt hour increased from $0.5774 to $0.5819.

The consumption of electricity is forecast to decline slightly in 1990 because of reduced consumption by the industrial sector. The closure of the phosphorous plant at Long Harbour is the main reason for the anticipated decrease in the industrial sector. The utility (residential and service) sector should record an increase in demand for electricity, however, growth is expected to be more moderate than in previous years, reflecting slower growth of the economy.

XII. TOURISM

The Province's tourism industry has been a traditional export of the Newfoundland and Labrador service sector. The industry encompasses both resident and non-resident travellers and includes travel for touring, sightseeing and outdoor sports and recreation; visits to friends and relatives; and business related reasons such as conventions. Tourist expenditures represent a considerable cash flow and the economic benefits of such activities flow into both rural and urban areas of the Province. Those firms which benefit most from tourist expenditures are, with the exception of the airline industry, found almost exclusively in the Services (Community, Business and Personal) and Trade (Wholesale and Retail) industries. The improved level of activity in these industries in 1989 was partly a reflection of the increased number of visitors to the Province as well as the increased level of resident tourist activity.

TABLE XII.1

INDUSTRIES WHICH BENEFIT FROM TOURIST EXPENDITURES

Community, Business and Personal Services	Wholesale and Retail Trade
Hotels, Motels and Tourist Clubs	Food Stores
Restaurants, Caterers and Other Food Services	Sporting Goods Stores
Camping Grounds and Travel Trailer Parks	Liquor, Wine and Beer Stores
Recreation and Vacation Camps	Gasoline Service Stations
Sports and Recreation Clubs and Services	Craft, Hobby and Souvenir Shops
Food Services	Prescription Drugs and Patent Medicine Stores
Travel Services	Clothing and Footwear Stores
Laundries and Cleaners	Florist Shops

Source: Standard Industrial Classification (1980); Economic Research and Analysis Division, Cabinet Secretariat.

The tourist industry performed well in 1989. The total number of tourist trips in the Province was estimated at 1.5 million while total tourist expenditures reached $383.5 million, up by 2.6 and 6.9 percent respectively over 1988. The improvement in expenditures was due to the higher number of tourist trips, as well as an increase in the average expenditure per tourist.

The number of people interested in visiting Newfoundland and Labrador increased in 1989, as indicated by the level of information inquiries to the Province. These inquiries can be categorized into three main types: written, telephone inquiries via either the toll-free 1-800 or the St. John's area number, and walk-in requests. In general, the bulk of written and toll-free telephone inquiries emanate from outside the Province. The number of information inquiries to the Province numbered 133,549 during 1989, up by 17.4 percent over 1988. The largest contributor to total growth, written inquiries, grew by 22.1 percent. Increased written inquiries is a reflection of the growing interest in

Newfoundland and Labrador as a travel destination for non-resident tourists, and can be partially attributed to increased marketing efforts.

TABLE XII.2

INFORMATION INQUIRIES
NEWFOUNDLAND AND LABRADOR, 1988 AND 1989

	1988	1989	% Change
Written	62,698	76,536	22.1
Telephone Inquiries			
1-800 Number	43,342	49,939	15.2
576-2830	5,873	5,864	-0.2
Walk-in Requests	1,805	1,210	-33.0
Total Inquiries	**113,718**	**133,549**	**17.4**

Source: Planning and Evaluation Division, Department of Development; Economic Research and Analysis Division, Cabinet Secretariat.

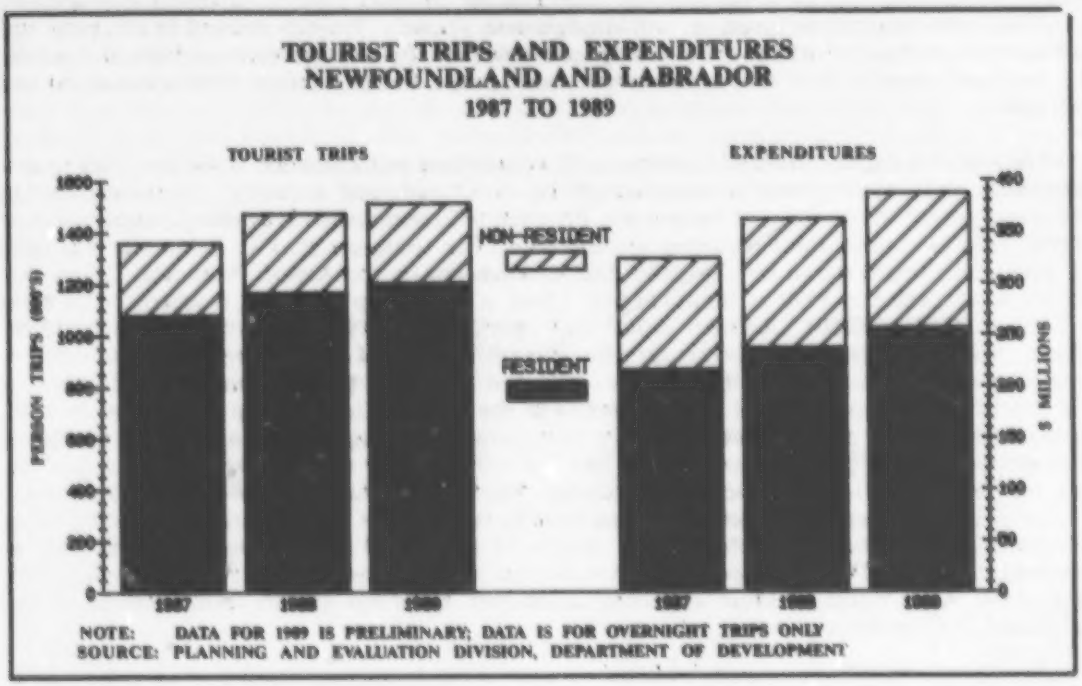
Advertising expenditures designed to enhance tourist activity increased by 7.3 percent in 1989 compared to 1988. Marketing efforts were concentrated on promoting the natural, historical and cultural aspects of Newfoundland and Labrador. Advertising expenditures in the United States increased by 24.4 percent compared to 1988 and represented over 53 percent of total advertising expenditures. Expenditures on advertising in other market regions such as Europe, in-Province and the rest of Canada, declined from 1988 levels. This was a result of a shift in expenditures to markets in the United States where most of the non-Canadian tourists originate.

The promotion of Newfoundland and Labrador in the United States was also achieved through a venture called "Sea Sell 89". This marketing plan was a joint project among the four Atlantic Provinces and consisted of tourism operators visting ports along the New England coast aboard the MS *Scotia Prince*. The project was considered a major success and will continue to operate in 1990.

The export component of the tourism industry is comprised of non-resident tourists travelling to the Province. During 1989, an estimated 312,000 non-resident tourists visited the Province and spent about $130.9 million, representing increases of about one and 4.5 percent respectively over 1988.

By mode of travel, tourists travelling to the Province by air were estimated at 194,900 during 1989, down by approximately three percent over 1988, while the number of tourists travelling by automobile increased by 8.4 percent to an estimated 117,000. Persons travelling by air had the highest per tourist expenditure of all tourist groups in the Province with an estimated $86.7 million spent during the year, up by approximately one percent over 1988. Automobile visitors spent $44.2 million, up by about 12.6 percent. Visitors arriving by air accounted for more than 62 percent of total non-resident tourists, and average per tourist expenditures were about 18 percent higher than for visitors arriving by automobile. Air travellers spent an estimated 72 percent of their non-transportation related tourist dollars on accommodation and restaurant meals as compared with about 53 percent for visitors arriving by automobile. In general, non-resident air travellers spend relatively more on accommodations and restaurant meals than do visitors arriving by automobile.

DIAGRAM XII.1


TOURIST TRIPS AND EXPENDITURES
NEWFOUNDLAND AND LABRADOR
1987 TO 1989

NOTE: DATA FOR 1989 IS PRELIMINARY; DATA IS FOR OVERNIGHT TRIPS ONLY
SOURCE: PLANNING AND EVALUATION DIVISION, DEPARTMENT OF DEVELOPMENT

Residents of the Province accounted for an estimated 1.19 million tourist trips, which represented 79 percent of the total in 1989. Total expenditures by resident tourists amounted to $252.6 million, constituting 65.8 percent of tourist expenditures during the year. This indicates that the average tourist expenditure is, as would be expected, somewhat lower for residents than for non-residents. Nevertheless, resident tourist trips increased by 3.0 percent while corresponding expenditures grew by 8.1 percent, thus indicating that the average resident tourist expenditure increased in 1989.

Increased tourist activity during 1989 was also reflected in a greater utilization of the Provincial and National Parks. During the camping season (May to August), the number of nights campers spent in Provincial parks increased by 6.6 percent to 414,000. Increases were not uniform throughout the Province as the number of camper nights decreased by ten percent for Provincial parks in the western portion of the Island. Provincial Park officials suggest that improved schedules and ferry service from Port aux Basques to North Sydney may have reduced the need for people to stay at these campgrounds overnight. Overnight campsite use in Gros Morne National Park increased by 14.3 percent from 1988. This may have been due to increased capacity as a result of the re-opening of the Lomond campground. Comparable data was not available for Terra Nova National Park.

The development of tourist attractions and infrastructure continued in 1989. Winter tourist attractions such as the Marble Mountain Ski Resort in Corner Brook and the newly opened White Hills Ski Resort in Clarenville both continued site development throughout the year. Development of the "Viking Trail", which encompasses the Great Northern Peninsula and Southeastern Labrador, continued in 1989 with improvements to facilities in Gros Morne National Park and further archaeological work at the Basque Whaling Site in Red Bay. Other projects throughout the

Province included the construction/expansion of hotels, trailer parks, hunting-fishing camps, cabins, hospitality homes, tour boat operations and theme parks.

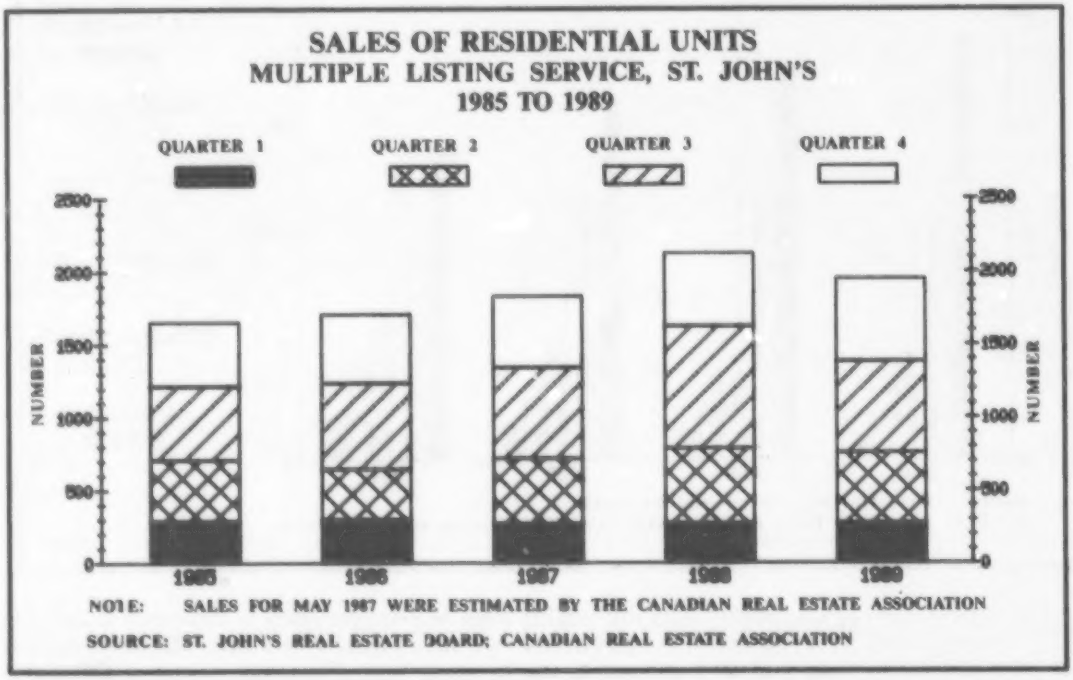
Increased foreign investment in tourist facilities was evident in 1989 under the "Immigrant Investor Program". This program provides incentives for business persons interested in emigrating from their home country to invest in, and immigrate to, Canada. Projects assisted by this program, such as the construction of the St. Christopher's Resort in Terra Nova National Park and the St. Christopher's Motel in Port Aux Basques, will provide more tourist facilities in Newfoundland and Labrador.

The outlook for the tourism industry in Newfoundland and Labrador is positive with tourist attractions and infrastructure continuing to be developed and improved. Increased foreign investment under the Immigrant Investment Program will, coupled with ongoing program expenditures, help to expand the Provinicial tourism base. The Govenors Park in Salmonier will open this year and is expected to be a positive tourist attraction on the Avalon Peninsula. Cruise ship activity will increase in 1990 as Bermuda Star Lines, a cruise ship company, is scheduled to make 10 visits to Corner Brook. Another cruise ship operator, Society Expeditions, has included St. John's, Trinity and St. Anthony on its trip schedule as part of their "Project Newfoundland, Greenland and Iceland Cruise". In addition, increased marketing of Newfoundland and Labrador as a tourist destination by eight tour operators in the United Kingdom, up from none in 1986, should benefit motor coach operators as they cater to the foreign sightseer. An enhanced marketing effort between the Provincial Government and the private sector should also be evident this year with the creation of the "Government-Industry Marketing Council". The recently announced Provincial road signage policy will make automobile travel easier for tourists by providing better directional and promotional information. Access to the Island of Newfoundland will also be improved with the MV *Joseph and Clara Smallwood* operating on the Argentia to North Sydney ferry route. As a result of these and other initiatives, sustained growth seems assured in this traditional, yet rapidly expanding industry.

XIII. REAL ESTATE

Gains in employment, real growth in personal incomes and lower than national rates of inflation created a positive environment for real estate investment in this Province in recent years. This was reflected by increased real estate activity, particularly in 1988, when sales reached an historically high level. During 1988, the most recent year for which Province-wide data was available, the number of real estate transactions approximated 4,700, an increase of 13.5 percent compared to the previous year and the value of sales grew by 21.5 percent to over $329 million. Increased real estate sales were due solely to growth in residential transactions. Residential sales during 1988 numbered 4,367 and associated value exceeded $303 million, increases of 15.9 and 25.9 percent respectively over 1987. Residential property typically comprises about 90 percent of total real estate sales and as a result, growth in this category easily offset a decline of about 12 percent in the number of non-residential property transactions in 1988.

DIAGRAM XIII.1


SALES OF RESIDENTIAL UNITS
MULTIPLE LISTING SERVICE, ST. JOHN'S
1985 TO 1989

NOTE: SALES FOR MAY 1987 WERE ESTIMATED BY THE CANADIAN REAL ESTATE ASSOCIATION

SOURCE: ST. JOHN'S REAL ESTATE BOARD; CANADIAN REAL ESTATE ASSOCIATION

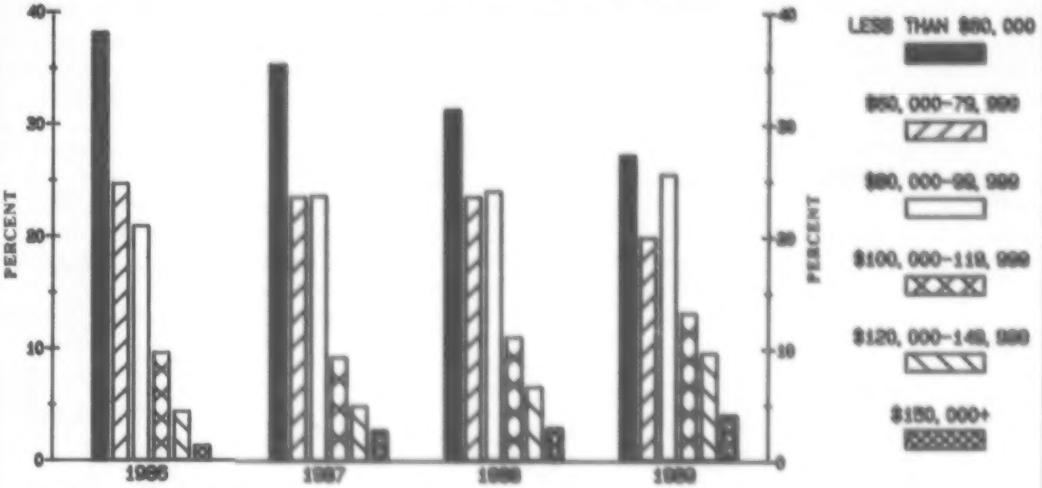
The residential real estate market in the St. John's area is the largest in the Province. This market, which in recent years had experienced positive growth, noted a slowdown in sales activity during 1989. Residential sales, as measured by the St. John's Multiple Listing Service (MLS), were 1,956, a decline of 8.3 percent from 1988. An increase of eight percent in the average price of residential transactions, however, resulted in only a slight decrease in the total value of homes traded during the year; the value of properties traded during 1989 was $162.9 million, a decrease of about one percent compared to the previous year. Declines in the number of residential transactions posted in the second and third quarters offset gains recorded in the first and last quarters of the year. Although sales were down in 1989, Diagram XIII.1 illustrates that with the exception of 1988, the number of transactions in 1989 exceeded the number in each of the years prior to 1988. The strong performance of the Provincial economy in 1988, coupled with the announcement in July of the intention to develop the Hibernia oil field resulted in brisk real estate sales and made 1988 a year of exceptionally strong growth in real estate sales.

Mortgage interest rates remained at high levels during 1989 and this, combined with the brisk sales activity in the previous year, may have constrained home purchasing activity. Interest rates for one year and five year terms in 1989 fluctuated but were generally higher than rates in 1988. Rates for one year terms, which were particularly higher than in the previous year, peaked at 13.50 percent around the end of the first quarter. Five year rates, which were only slightly higher than in 1988, also peaked at the end of the first quarter at 12.75 percent. Rates for both one and five year terms declined slightly in May and then remained fairly stable throughout the remainder of the year. At the end of December, mortgage interest rates stood at 12.75 percent for one year terms and 12.00 percent for five year terms.

DIAGRAM XIII.2

DISTRIBUTION OF RESIDENTIAL UNITS SOLD BY PRICE CATEGORY, MULTIPLE LISTING SERVICE,

ST. JOHN'S, 1986 TO 1989



NOTE: DATA FOR MAY, 1987 IS NOT INCLUDED
SOURCE: ST. JOHN'S REAL ESTATE BOARD; ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

The distribution of residential units sold during 1989 by price grouping is illustrated in Diagram XIII.2. During 1989, 47.4 percent of the properties sold were priced at less than $80,000 compared with 55.2 percent in 1988 and 59.3 percent in the previous year. Properties priced at $80,000 or more accounted for 52.6 percent of total sales, up from 44.8 percent in 1988 and 40.7 percent in 1987. One factor which has likely influenced the decline in the proportion of homes sold at prices less than $80,000 in recent years is the reduced supply of homes for sale in the market that fall within this price range. For example, in January 1985 a detached bungalow in the West End of St. John's was priced at about $77,800, however, the same house, in October 1989, was estimated to cost about $98,900. Increases in home prices in recent years have moved many homes into higher price groupings and this accounts for part of the shift in the distribution of sales. Sales of higher priced homes costing $100,000 or more have been recording the strongest growth in recent years. Sales of properties in this price grouping have grown, on average, in excess of 30 percent each year from 1985 to 1989. Several factors which have contributed to the sales of higher priced homes in recent years include real gains in personal incomes, gains in full-year and part-year employment and lower than national rates of inflation.

TABLE XIII.1

HOUSE PRICES

House Type	Selling Price October 1988	Selling Price October 1989	Percent Change October 1988 to October 1989	Percent Change October 1988 to January 1989	Percent Change January 1989 to April 1989	Percent Change April 1989 to July 1989	Percent Change July 1989 to October 1989
Standard Townhouse							
St. John's - East End	54,200	63,900	+17.9	+20.8	0.0	-0.5	-2.0
St. John's - West End	52,300	63,600	+21.6	+21.4	+0.6	+0.5	-0.9
Mount Pearl	50,500	64,000	+26.7	+23.8	+2.1	+0.6	-0.3
Detached Bungalow							
St. John's - East End	95,300	102,700	+7.8	+3.4	+4.2	+0.9	-0.8
St. John's - West End	92,900	98,900	+6.5	+5.0	+2.5	0.0	-1.0
Mount Pearl	90,600	96,700	+6.7	+6.5	+1.9	0.0	-1.6
Standard Condominium Apt.							
St. John's - East End	101,800	106,700	+4.8	+1.6	+2.0	+2.1	-0.9
Standard Two-Storey							
St. John's - East End	119,900	128,400	+7.1	+3.0	+3.0	+1.5	-0.5
St. John's - West End	117,000	123,500	+5.6	+3.8	+2.1	+0.3	-0.7
Mount Pearl	111,500	122,900	+10.2	+4.5	+6.0	0.0	-0.5
Executive Detached Two-Storey							
St. John's - East End	136,700	155,300	+13.6	+7.2	+3.2	+4.2	-1.4
St. John's - West End	128,200	149,900	+16.9	+10.4	+3.2	+3.9	-1.2
Mount Pearl	120,400	141,500	+17.5	+12.5	+4.1	+1.8	-1.5
Luxury Condominium Apt.							
St. John's - East End	162,800	171,900	+5.6	+5.2	+0.6	+0.8	-1.0

Notes: All properties have been considered as free of debt. Percentage calculations based upon rounded data.

The *Glossary of Housing Types* contained on the next page was provided by Royal LePage Real Estate Services Ltd. Housing price information for the Senior Executive home, illustrated in the *Glossary*, is not published for the St. John's and Mount Pearl areas.

Source: Royal LePage Survey of Canadian House Prices; Economic Research and Analysis Division, Cabinet Secretariat.

The strong demand for housing in the real estate market throughout 1988 exerted upward pressure on house prices in that year and this pressure intensified during the early part of 1989. Pricing activity in the one year period ending October 1989 for various types of homes is presented in Table XIII.1. Upward price movement was observed for all types of houses in October 1989 compared to a year earlier, however, pricing activity did vary throughout the year. Price increases for most structures were most pronounced in the period extending from October 1988 to January 1989. Large increases in housing sales throughout 1988 consumed a large proportion of the available

Glossary of Housing Types

Detached Bungalow

A detached, three-bedroom single storey home with 1½ bathrooms and a one-car garage. It has a full basement but no recreation room, fireplace or appliances. Using outside dimensions (excluding garage), the total area of the house is 111 sq. metres (1,200 sq. ft.) and it is situated on a full-serviced, 511 sq. metre (5,500 sq. ft.) lot. Depending on the area, the construction style may be brick, wood, siding, or stucco.

Executive Detached Two-Storey

A detached two-storey, four-bedroom home with 2½ bathrooms, a main floor family room, one fireplace, and an attached two-car garage. There is a full basement but no recreation room or appliances. Using the exterior dimensions (excluding garage), the total area of the house is 186 sq. metres (2,000 sq. ft.), and it is situated on a fully-serviced, 604 sq. metres (6,500 sq. ft.) lot. Depending on the area, the construction style may be brick, wood, aluminum siding, stucco, or a combination like brick and siding.

Standard Two-Storey

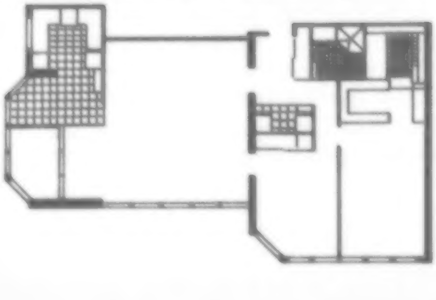
A three-bedroom, two-storey home with a detached garage. It has a full basement but no recreation room. Using outside dimensions, the total area of the house is 139 sq. metres (1,500 sq. ft.) and it is situated on a fully-serviced, city-sized lot of approximately 325 sq. metres (3,500 sq. ft.). The house may be detached or semi-detached and construction style may be brick, wood, siding, or stucco.

Standard Townhouse

Either condominium or freehold, the townhouse (rowhouse) has three bedrooms, a living room and dining room (possibly combined) and a kitchen. Also included are 1½ bathrooms, standard broadloom, a one-car garage, a full unfinished basement and two appliances. Total inside area is 92 sq. metres (1,000 sq. ft.). Depending on the area, the construction may be brick, wood, siding or stucco.

Senior Executive

A two-storey, four or five bedroom home with three bathrooms, main floor family room plus atrium or library. Two fireplaces, a full unfinished basement and an attached two-car garage. The house is 279+ sq. metres (3,000+ sq. ft.) and is situated on a fully serviced 627 sq. metre (6,750 sq. ft.) lot. Construction may be brick, stucco, siding, or in combination.



Standard Condominium Apartment

A two-bedroom apartment comprising a living room, a dining room (possibly combined) and a kitchen, in a high-rise building with an inside floor area of 84 sq. metres (900 sq. ft.). Amenities include standard broadloom, 1½ bathrooms, 2 appliances, a small balcony and 1 underground parking space. Common area includes a pool and some minor recreational facilities.

Luxury Condominium Apartment

A two-bedroom apartment comprising a living room, a dining room (possibly combined), and a kitchen, with a family room or den, in a high-rise building with an inside floor area of 130 sq. metres (1,400 sq. ft.). Amenities include upgraded broadloom, 2 full bathrooms, ensuite laundry and storage areas, 5 appliances, a large balcony and 1 underground parking space. Common area includes a pool, sauna and other major recreational facilities.

housing stock in the real estate market and, as a result, limited supply in the market during the early part of last year. For example, at the end of January 1989 there were approximately 22 percent fewer houses listed for sale with the Multiple Listing Service than in January 1988. The constraint in supply, together with solid demand, resulted in strong increases in house prices during the early part of last year. An increase in the supply of houses in the last half of 1989 and reduced sales activity compared to 1988 resulted in a more balanced market throughout the latter part of the year. This balancing of the market was reflected in the decline in prices observed between July and October 1989. Overall, in the one year period ending October 1989 house price increases ranged from a high of 26.7 percent for a townhouse in Mount Pearl to a low of 4.8 percent for a standard condominium in the East End of St. John's.

Price gains in the aggregate housing market in the St. John's area, which is composed mainly of houses being offered for resale, were reflected in price increases obtained by contractors for new houses placed on the market. The new housing price index, which measures change in the contractors' total selling price, including land and structure, continued its upward trend in 1989. The index advanced by 5.5 percent during 1989 compared to the 1988 annual price index. Increases in the price index were due largely to growth in the house component which mainly relates to the current cost of the structure. This index advanced by 6.8 percent while the land component index advanced by 2.1 percent. The strongest increase in new house prices in 1989, on a month-over-month basis, occurred in September. During this month, prices were 3.9 percent higher compared to the previous month and 7.7 percent higher than in September 1988. Following strong upward movement in September, new house prices remained flat throughout the remainder of the year.

The outlook for the real estate industry in 1990 is positive with sales activity expected to exceed 1989 levels. The main factors behind the expected increase include sustained growth in employment and personal income, lower interest rates and the proposed 1991 Goods and Services Tax (GST). Real estate sales are expected to be particularly brisk in the latter part of 1990 as consumers enter the market to take advantage of declining interest rates and to purchase their homes prior to the implementation of the GST. An agreement to develop the Hibernia oil field is expected to be finalized in 1990 and this could stimulate real estate sales activity further.

XIV. TRANSPORTATION

The transportation industry accounted for an estimated 8.2 percent of Gross Domestic Product (GDP) in the Province's service sector in 1987 and about 5.2 percent of total GDP. This industry employs a large number of individuals in the Province and includes the activities of firms and agencies which provide both inter-Provincial and intra-Provincial transportation services. The services provided by this industry include air, water, road and rail (Labrador only) transport, all of which are fundamental to the functioning of the economy. The transportation industry facilitates the movement of large volumes of freight to, from and within the Province. This is particularly critical for Newfoundland and Labrador since the bulk of the output of the primary and secondary industries such as fish products, newsprint and iron ore are exported while large volumes of consumer goods are imported. The industry also provides for the transportation of individuals within the Province, as well as to and from the Province.

TABLE XIV.1

MARINE ATLANTIC PASSENGER TRAFFIC PORT AUX BASQUES AND ARGENTIA, 1988 AND 1989

	1988	1989	Percent Change
Port aux Basques - North Sydney			
Passengers	356,829	384,873	7.9
Passenger Related Vehicles	107,884	116,193	7.7
Argentia - North Sydney			
Passengers	21,146	28,026	32.5
Passenger Related Vehicles	7,076	9,292	31.3
Total			
Passengers	377,975	412,899	9.2
Passenger Related Vehicles	114,960	125,485	9.2

Notes: Figures include traffic travelling in both directions on the Port aux Basques-North Sydney and Argentia-North Sydney ferry services.

Source: Marine Atlantic; Economic Research and Analysis Division, Cabinet Secretariat.

An increasingly popular mode of transportation between Newfoundland and mainland Canada is the ferry service. Passenger traffic on Marine Atlantic's ferry service between Newfoundland and Nova Scotia rose by 9.2 percent in 1989 for a total of 412,899 passengers. Consistent with the growth in the number of passengers were increases in passenger related vehicles. In total, there were 125,485 passenger related vehicles transported by the service last year, an increase of over nine percent from the previous year. Strongest growth in passenger traffic last year was noted for the Argentia - North Sydney route, due to the increased number of ferry crossings in the 1989 season compared to 1988; mechanical problems with the MV *Ambrose Shea* during 1988 placed the ferry out of commission for part of the season and reduced the number of crossings on the Argentia run by about 26 percent. Increased passenger traffic was also observed on the Port aux Basques - North

Sydney route as a result of continued growth in tourist activity and increased recognition of the ferry service as an alternative means of travel.

Marine Atlantic took possession of the MV ***Joseph and Clara Smallwood***, sister ship to the MV *Caribou*, in the latter part of 1989. The new ferry, constructed at the MIL-Davie Shipyard in Lauzon, Quebec at an estimated cost of $146 million, will replace the MV *Ambrose Shea* on the seasonal Argentia route beginning in June. The ***Smallwood*** is expected to make the North Sydney - Argentia crossing in approximately 13 hours, a considerable improvement from the previous crossing time of 19 hours. Prior to beginning service on the Argentia route, the ***Smallwood*** will serve on the North Sydney - Port aux Basques crossing. The ferry's service on this route began early this year, but was interrupted in late January when the ship sustained slight damage when she grazed an island in Port aux Basques harbour. At the time of writing, repairs plus some minor mechanical problems had prevented the ***Smallwood's*** return to service.

Marine Atlantic's seasonal Argentia ferry service may be extended in the near future pending review by Transport Canada of a commissioned independent study. The study, requested by Transport Canada in the fall of 1989, examined the feasibility of extending the Argentia service from the current 13 week period, up to and including year-round operation.

The number of people travelling on the Canadian National Roadcruiser bus service in the Province during 1989 was slightly more than 157,000. This represented a decline of 9.7 percent compared to 1988 and is the continuation of a downward trend which began in 1984. Several factors have contributed to traffic declines including improved retail services in smaller centers which has reduced the need for some individuals to travel and a reduction in the reliance upon bus as a mode of travel.

Another important aspect of Marine Atlantic's service between Newfoundland and North Sydney is the provision of a transportation link for commercial vehicles. Commercial traffic, consisting of trucks and trailers, move freight both to and from the Island. Commercial activity on the North Sydney and Newfoundland service dropped by 4.2 percent last year to 60,157 units. The decrease in commercial traffic over this period was due to a decline of about 17 percent in the number of drop trailers transported by the service.

Other freight moved by Marine Atlantic's service between Newfoundland and North Sydney last year included containerized cargo and new vehicles. The number of containers and new vehicles transported between North Sydney and Port aux Basques declined in 1989. There were close to 7,500 containers carried by the service, less than half the number transported during 1988, and just over 1,200 new vehicles carried, a decline of approximately 79 percent. Declines in the amount of freight handled at the Port aux Basques crossing point can be partially attributed to the closure of the Island railway, which took place in the fall of 1988, and to increased handling of cargo by private carriers.

The total amount of freight transported by Marine Atlantic's coastal services in the Province increased by about two percent in 1989 to over 91,000 tons. The South Coast service experienced strong growth as freight rose by more than 26 percent while cargo transported on the Labrador service declined marginally (1.3 percent) from the high level of 79,789 tons in 1988.

The total amount of water-borne cargo moving in and out of the port of St. John's during 1989 approximated 976,600 metric tonnes, an increase of 3.4 percent compared to 1988. Increases in the amount of dry bulk (6.9 percent to 94,990 metric tonnes) and general cargo (12.6 percent to 535,636 metric tonnes) were more than enough to offset a decline in liquid bulk (down 9 percent to 346,006 metric tonnes). Growth in dry bulk shipments was due to an increase in the amount of salt shipped into the port during the year, while the decline in liquid bulk was the result of reduced shipments of gas and fuel oil. General cargo accounted for the largest share of the overall increase in tonnage during the year due to increased handling of containerized freight. During 1989, containerized freight rose by 18.0 percent to 393,762 metric tonnes. The increase in the amount of cargo passing through the port last year was largely due to the closure of the Island railway.

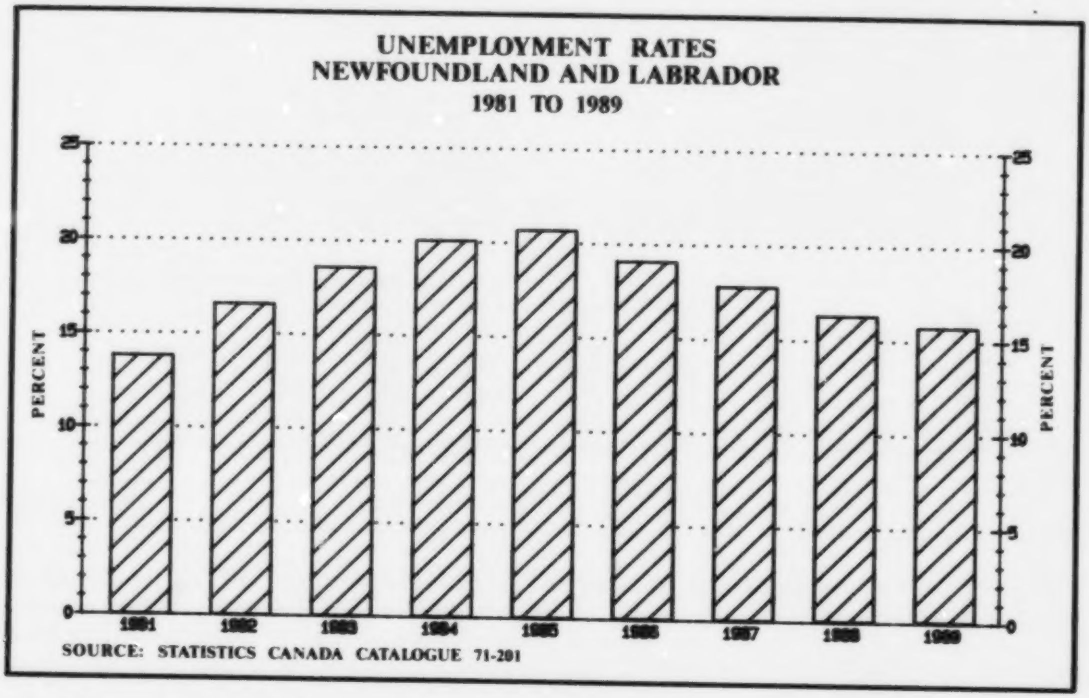
Water-borne cargo moving in and out of the port of Corner Brook was estimated at approximately 664,989 metric tonnes during 1989, an increase of almost 14 percent over 1988. Increased freight movement in the Corner Brook port in 1989 was attributed to higher shipments of newsprint products, containerized cargo and automobiles. Shipments of newsprint products rose by over 25 percent last year to 223,862 metric tonnes, while more than 112,800 metric tonnes of containerized freight moved through the port, more than double the amount for 1988. Close to 6,800 automobiles were shipped, about eight times the figure for 1988. Growth in the amount of freight handled at the port in 1989 was partly attributed to the closure of the Island railway, increased handling of cargo by private carriers and the recent enhancement of cargo handling facilities in the port.

The outlook for the transportation industry during 1990 is positive. Continued growth in both consumer spending and tourism is expected to stimulate activity in the industry. The arrival of the MV *Joseph and Clara Smallwood* on the Argentia - North Sydney ferry route and Marine Atlantic's new Argentia ferry terminal, which is scheduled to be completed this year, will improve the services provided to users of this route. Improvements to port infrastructure, undertaken at the ports of St. John's and Corner Brook, have enhanced services offered to users of water transportation. The St. John's port redevelopment program, started in 1984, was completed in 1989, thus improving vessel handling capabilities. Further plans to expand the main terminal are scheduled for 1990. The revitalization program at the Corner Brook port has also been largely completed thus improving this port's ability to handle increased cargo. A negative factor in the outlook for the transportation industry in 1990 is the weaker performance anticipated in the primary fishing industry and hence in manufacturing output. Reduced output in the manufacturing industry may negatively impact on some transportation services this year. For example, many trucking firms which now transport goods into the Province also carry fish products to markets outside of the Province. A reduction in the amount of fish leaving the Province can be expected to have a negative impact on round-trip revenues received by some carriers. Consequently, the decline in the amount of freight leaving the Province could put upward pressure on freight rates. Nevertheless, major changes in the transportation industry have resulted in large infrastructure projects in recent years. This expansion has been precipitated by a change in the manner in which some freight now moves into the Province. With improvements ongoing, and the addition of more efficient passenger ferries, the future of the transportation industry is promising.

XV. EMPLOYMENT AND THE LABOUR FORCE

Provincial labour markets in 1989 were marked by rising employment and falling unemployment rates, a continuation of trends which have characterized the Province's labour markets since 1985 following the slow recovery from the 1981/82 recession. Employment in Newfoundland and Labrador increased by 8,000 on a monthly average basis during 1989 marking the fourth consecutive year of strong employment gains. Furthermore, Provincial employment growth of 4.1 percent was double the national rate of 2.0 percent and was in fact, only exceeded by exceptionally strong employment growth of 5.7 percent in British Columbia. Employment growth outpaced labour force growth of 3.0 percent and caused the unemployment rate to fall to 15.8 percent. This was the lowest rate recorded since 1981 and was five percentage points below the record high unemployment rate recorded in 1985.

DIAGRAM XV.1

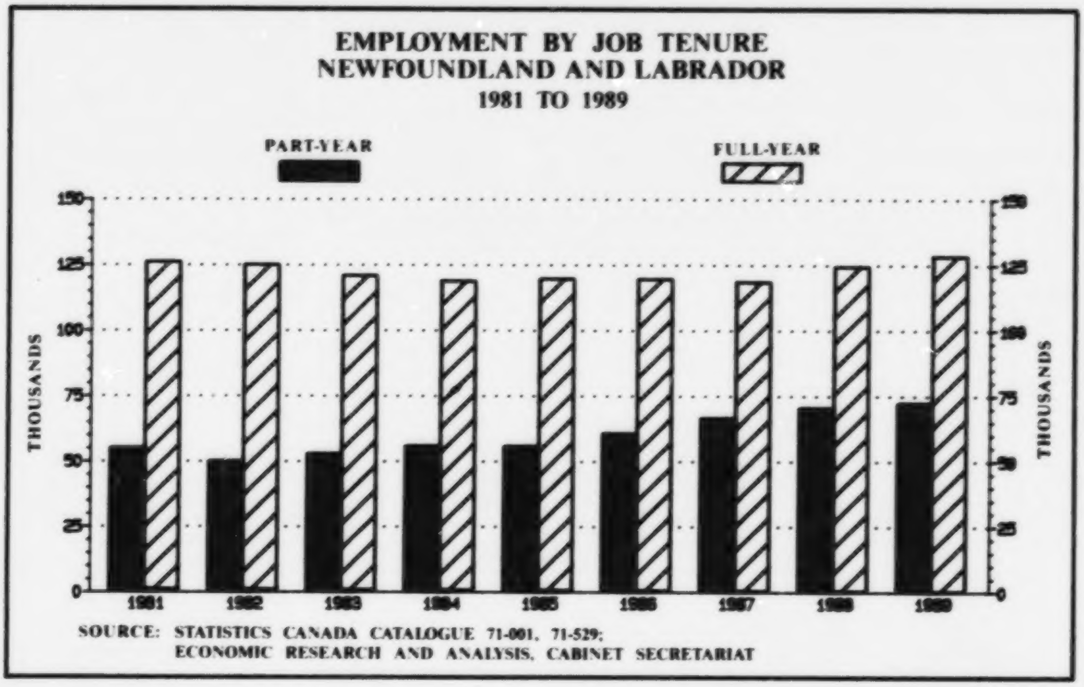

UNEMPLOYMENT RATES
NEWFOUNDLAND AND LABRADOR
1981 TO 1989

SOURCE: STATISTICS CANADA CATALOGUE 71-201

Employment growth during 1989 was accompanied by an increase in the number of workers in Provincial labour markets. This was reflected in a rising participation rate in 1989 which caused the labour force to grow by 7,000 on a monthly average basis. The expansion of the workforce offset much of the 8,000 person year gain in employment and hence tempered the fall in the unemployment rate. It is likely that many of the new entrants to the Province's labour force in 1989 joined the ranks of the employed for some part of the year rather than the ranks of the unemployed while, at the same time, it is likely that some of those who had previously been unemployed also succeeded in finding some employment. This is suggested by the fact that monthly average employment increased by 8,000 in 1989, exceeding the increase in the labour force by 1,000.

Statistics Canada defines full-time employment as employment that "consists of persons who usually work 30 hours or more per week, plus those who usually work less than 30 hours but consider themselves to be employed full-time". A majority (about 80 percent) of the 8,000 gain in employment during 1989 accrued to persons in full-time employment; the balance was accounted for by gains in part-time employment. The strong gains in full-time employment marked a continuation of a trend established in 1985. In the past four years, employment in the Province, as measured in person years, has increased by a total of 27,000; most of this increase (about 22,000 person years) consisted of full-time employment. This tendency for employment gains to be of a full-time nature rather than part-time, aids in explaining the fact that in 1989, more than 88 percent of total employment in Newfoundland and Labrador was accounted for by persons working full-time.

DIAGRAM XV.2



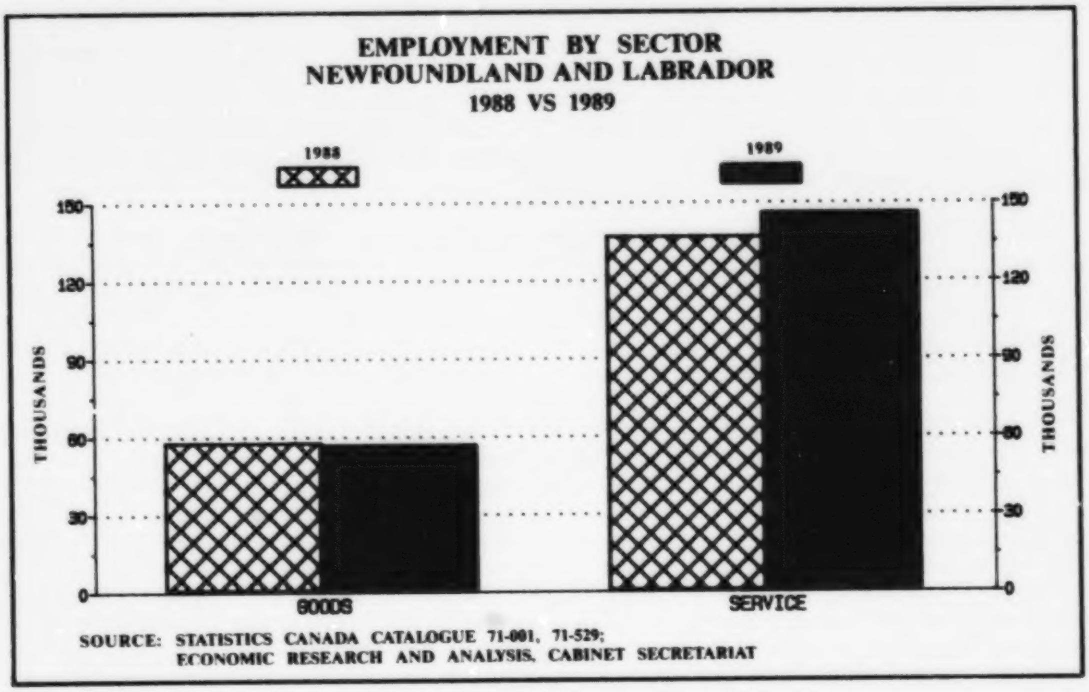
EMPLOYMENT BY JOB TENURE
NEWFOUNDLAND AND LABRADOR
1981 TO 1989

SOURCE: STATISTICS CANADA CATALOGUE 71-001, 71-529;
ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

Whereas the distinction between *full-time* and *part-time* employment rests on the number of hours usually worked per week, the distinction between *full-year* and *part-year* employment rests on the length of time a person has been continuously employed. In other words, full-year employment refers to employment which lasted for at least the full 12 months of any given year.

Employment gains recorded in 1989 were the result of an increase in both full-year and part-year employment, however, it is estimated that full-year employment accounted for the majority of the gains. Following a peak of 125,000 in 1981, the level of full-year employment in the Province declined and remained below the 1981 peak level in every year from 1982 to 1988. Gains in full-year employment last year meant that the highest level of full-year employment ever recorded in the Province's history was recorded in 1989. The level of part-year, or seasonal employment, also increased in 1989, however, the pace of part-year employment growth slowed considerably from recent years. Stronger full-year employment growth and slower part-year employment growth represents a reversal of employment trends observed throughout most of the 1980s when virtually all employment gains stemmed from increases in part-year employment. While estimates indicate that the growth of part-year employment slowed in 1989, the gains recorded nevertheless caused the dependency on Unemployment Insurance (UI) to rise. Data for the first ten months of 1989 indicated that the average number of UI beneficiaries had increased by in excess of five percent over the same period in 1988, a continuation of trends observed throughout the 1980s. A rising

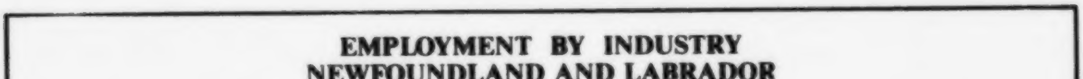
DIAGRAM XV.3



EMPLOYMENT BY SECTOR
NEWFOUNDLAND AND LABRADOR
1988 VS 1989

SOURCE: STATISTICS CANADA CATALOGUE 71-001, 71-529; ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

DIAGRAM XV.4



EMPLOYMENT BY INDUSTRY
NEWFOUNDLAND AND LABRADOR
1988 VS 1989

NOTE: PRIMARY INDUSTRIES EXCLUDE AGRICULTURE
SOURCE: STATISTICS CANADA CATALOGUE 71-001, 71-529; ECONOMIC RESEARCH AND ANALYSIS, CABINET SECRETARIAT

number of UI beneficiaries has been a key characteristic of the 1980s, and a reflection of the extent to which workers in the Province have come to rely on part-year or seasonal employment.

Almost 90 percent of the increase in employment throughout the Province during 1989 accrued to females; the remainder was accounted for by gains made by males. Monthly average employment for females rose by about 7,000 last year, marking the largest gain in employment for females since 1975. Female employment growth outpaced labour force growth by a wide margin, resulting in a decline in the female unemployment rate of about two percentage points, the largest drop recorded since 1980. Furthermore, the absolute drop in the number of females unemployed in 1989 marked the first such decline since 1980.

Labour force statistics are also available for the Province by four economic regions; these regions are illustrated in Map XV.1. Figures for 1989 indicate that positive labour force performance was broadly based throughout the Province. Decreases in the unemployment rate were noted in all areas of the Province for which data was available. The average unemployment rate for 1989 was not available for the South Coast of the Province (Region 020). Employment gains were noted for all areas of the Province with Regions 030 and 040 experiencing the strongest employment growth.

The Provincial economy can be divided into two main sectors, the goods producing sector and the service producing sector. Industries in the goods producing sector include primary industries such as agriculture, logging, fish harvesting and mining as well as manufacturing and construction industries. Employment in the goods producing sector generally accounts for about 30 percent of total employment in the Province. The relatively small share of employment, as measured in person years, accounted for by this sector is partially explained by the fact that many of the jobs provided by the goods producing industries are seasonal, or part-year, in nature. The remaining 70 percent of total employment is accounted for by the service sector. Industries which make up the service producing sector include transportation and communications; wholesale and retail trade services throughout the Province; financial, insurance and real estate services; community, business and personal services, a large percentage of which is accounted for by education, health and welfare services; and services provided by the municipal, provincial and federal governments (public administration). As illustrated in Diagram XV.3, employment growth in 1989 was concentrated in the service sector. An average of 9,000 more persons were employed in the service sector in 1989 compared to 1988. Weaker performances in some of the goods producing industries resulted in employment in this sector falling slightly below levels recorded in 1988. Employment by industry, as measured by the Statistics Canada *Labour Force Survey*, is illustrated in Diagram XV.4.

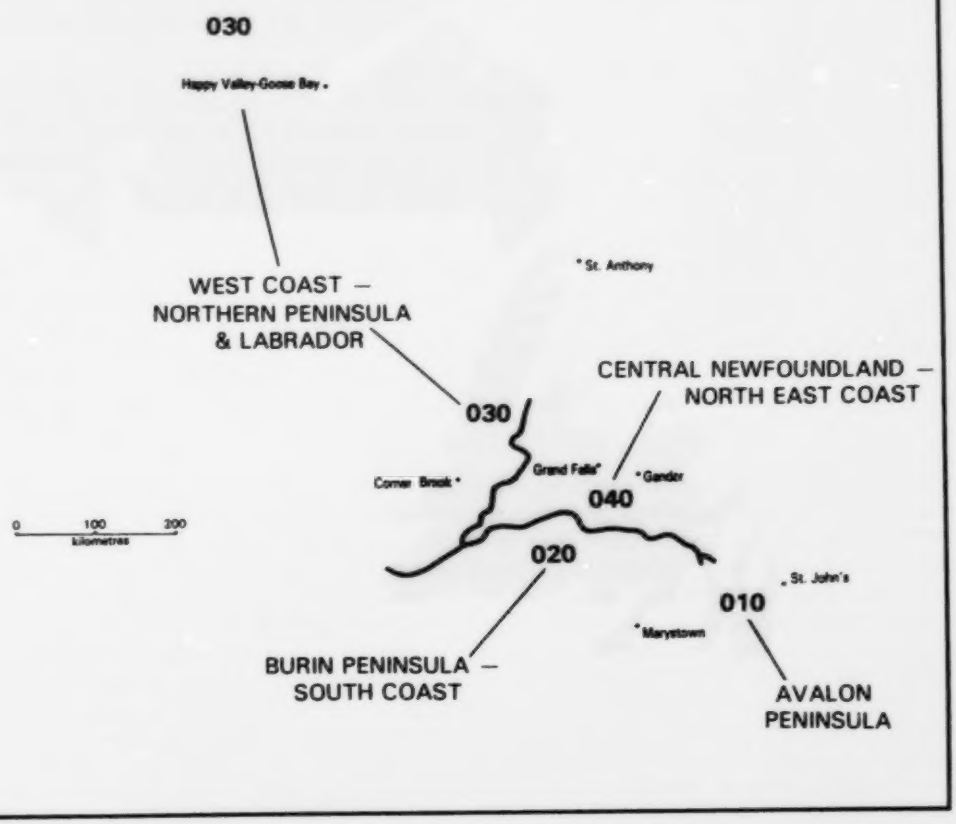
Full-year and seasonal employment gains are expected in 1990 although growth is forecast to be slower than last year. Problems faced by the fishery as a result of groundfish quota reductions and by the forest industry due to weaknesses in international newsprint markets will impede employment growth in the primary and manufacturing industries this year. Activity in the manufacturing industry will be further constrained by the closure of the Long Harbour phosphorus plant. Employment growth in 1990 is expected to follow similar trends observed in 1989 with employment gains concentrated in the service sector. The number of individuals entering the Province's labour markets should increase slightly in 1990; the labour force is anticipated to grow by about 3,000. Employment gains, however, are not expected to be large enough to absorb the increase in the labour force and this may cause the unemployment rate to rise slightly, following the anticipated national trend. Results for the month of January, if used as an indication, point toward substantiating this forecast. Employment gains of 7,000 in January of this year were not large enough to offset an 11,000 increase in the labour force and, as a result, the unemployment rate in January of this year rose from the same month in 1989.

MAP XV.1

Labour Force by Economic Region in Newfoundland and Labrador 1989 Annual Average ('000)

	Labour Force	Population Labour Force Age
Region 010	110	188
Region 020	21	41
Region 030	55	95
Region 040	53	104

Source: Statistics Canada catalogue 71-001.



XVI. CONCLUSION

The past year was marked by continued, although slower, growth in the Provincial economy. Provincial GDP grew by an estimated 1.4 percent in real terms, marking the seventh consecutive year of real growth. Employment grew by more than four percent, or an estimated 8,000 person years on an annual average basis, representing the fourth consecutive year of employment increases. Growth in employment was a major contributor to gains in personal income although benefits were also realized from real increases in average weekly wages in the Province. The gains in personal income, as well as another good year for the tourism industry contributed to continued strong growth in the value of retail trade which reached historically high levels in real terms. The rate of economic expansion in the Provincial economy was constrained by a weaker performance in the goods producing sector, primarily related to difficulties experienced in the fishing and forest industries.

Both the volume and value of fish landings in the Province declined during 1989, primarily the result of resource supply constraints associated with quota reductions. Reduced landings constrained the output of the fish processing industry which was also affected by relatively weak prices for fish products. Weak international markets for newsprint constrained shipments by the Province's pulp and paper industry, leading to lower capacity utilization rates and heavy price discounting. Both the fishing and forest industries also had to contend with the negative revenue implications of a stronger Canadian dollar against the currencies of most customers and competitors. Factors such as the closure of the Long Harbour phosphorus plant and reduced activity at the Marystown Shipyard served to further constrain the output of the Province's manufacturing industry and hence goods producing sector in 1989. Gains recorded in the Province's agriculture, mining, construction and utilities industries, as well as in the service industries were, however, more than sufficient to offset losses elsewhere, and lead to real GDP and employment growth.

While some gains were achieved in 1989, the Province continues to face a number of difficult challenges and emerging problems. The unemployment rate fell to an eight year low in 1989, however, unemployment levels in the Province continue to be high by any standard of comparison. As well, workers in the Province continue to rely heavily on part-year, or seasonal, sources of employment and on Unemployment Insurance benefits to supplement their income. The problems faced by the fishery as a result of groundfish quota reductions will continue to present problems to policy makers and the industry alike. The forest industry faces difficult international market conditions which have contributed to the announced reduction in newsprint production capacity at the Abitibi-Price Grand Falls mill by March 1990. Development of offshore oil and gas and further hydroelectric capacity are also issues which present challenges to policy makers. Furthermore, growth of the public sector is constrained as the Federal Government attempts to reduce its current account deficit. Efforts to reduce the Federal deficit have included measures to restrict the growth of transfer payments to the Province which, in turn, may curtail growth in spending by the Provincial Government.

Nevertheless, economic growth is expected in the short term as the Province continues to build upon the gains achieved in recent years. The international economy, and especially the United States, is expected to experience real economic growth again in 1990 which will translate into sustained demand for the Province's exports. Real GDP in the Province is expected to expand for the eighth consecutive year as gains in the service sector should be more than sufficient to offset declines in the goods producing sector precipitated by the fishing and forest industries. Output from the fishing industry will continue to be constrained by quota reductions while the forest industry will face continued difficult market conditions. The mining industry, and particularly the iron ore industry, has undergone a period of rationalization throughout the 1980s and the gains in productivity and efficiency achieved have improved the industry's competitive position. As such, the mining industry is expected to perform well during the coming year. Higher oil prices in 1989 could stimulate oil and gas development drilling off the coast of the Province in 1990 and may even lead to some onshore drilling in western Newfoundland. The massive Hibernia oil field development project is also expected to receive approval during 1990 as both levels of Government and the Mobil consortium continue to negotiate terms of the final agreement. The overall level of activity in the construction industry during 1990 is expected to remain at the historically high levels of recent years and the outlook for this industry will improve as the Hibernia project proceeds. This would also lead to a slight increase in real investment growth, despite expected declines in housing starts for the year. Higher levels of personal income should stimulate consumer expenditures and lead to another year of real growth in retail sales, albeit at a slower pace than in recent years. Employment growth is expected to continue in 1990, marking the fifth consecutive year of employment gains.

Appendix 1

STATISTICAL INDICATORS OF NEWFOUNDLAND AND LABRADOR

TABLE 1.1

GROSS DOMESTIC PRODUCT AT FACTOR COST BY INDUSTRY NEWFOUNDLAND AND LABRADOR: 1987

	Gross Domestic Product	
	$Millions	Percent of Total
Primary	**737.0**	**11.4**
Agriculture	22.0	0.3
Forestry	55.0	0.9
Mining, Quarries & Oil Wells	455.0	7.0
Fishing and Trapping	205.0	3.2
Manufacturing	**680.0**	**10.5**
Fish Products	330.0	5.1
Pulp and Paper Products	130.0	2.0
Other Manufactured Products	220.0	3.4
Construction	610.0	9.4
Electric Power & Water Utilities	384.0	5.9
Sub-total: Goods Producing	**2411.0**	**37.3**
Transportation, Communications & Other Utilities	555.0	8.6
Trade	700.0	10.8
Finance, Insurance & Real Estate	575.0	8.9
Community, Business & Personal Services	1490.0	23.1
Public Administration	725.0	11.2
Sub-total: Service Producing	**4045.0**	**62.7**
TOTAL: ALL INDUSTRIES	**6456.0**	**100.0**
Residual Error of Estimate*	(74.0)	
TOTAL GDP AT FACTOR COST	**6382.0**	

Notes: * When GDP is calculated on an industry basis, the total for all industries does not equal total GDP. The difference is known as a residual error of estimate.

Parentheses denote a negative value.

Source: Cabinet Secretariat (estimate).

TABLE 1.2

EMPLOYMENT BY INDUSTRY
NEWFOUNDLAND AND LABRADOR: 1988

	Employment	
	Thousands	Percent of Total
Primary	**19.0**	**9.8**
Agriculture	1.1	0.6
Forestry	1.5	0.8
Mining, Quarries & Oil Wells	3.3	1.7
Fishing & Trapping	12.0	6.2
Manufacturing	**24.0**	**12.4**
Fish Products	10.4	5.4
Pulp & Paper Products	2.3	1.2
Other Manufactured Products	6.0	3.1
Construction	11.0	5.7
Sub-total: Goods Producing	**57.0**	**29.5**
Transportation, Communications & Other Utilities	16.0	8.3
Trade	36.0	18.7
Finance, Insurance & Real Estate	6.0	3.1
Community, Business & Personal Services	63.0	32.6
Public Administration	18.0	9.3
Sub-total: Service Producing	**136.0**	**70.5**
TOTAL: ALL INDUSTRIES	**193.0**	**100.0**

Notes: Subtotals in the goods and service producing industries will differ slightly from the sum of the industries which are found in each category. This stems partly from the fact that the Other Utilities component of Transportation, Communications & Other Utilities is included under the goods producing sector. In addition, some components of the goods producing industries (i.e., primary and manufacturing) do not add to the subtotal due to different data sources.

Percentages may not add to 100 due to independent rounding.

Source: Statistics Canada; Newfoundland Statistics Agency and Economic Research and Analysis Division, Cabinet Secretariat.

TABLE 1.3

SELECTED ECONOMIC INDICATORS
NEWFOUNDLAND AND LABRADOR: 1986 - 1990

	1986	1987	1988	1989	1990f
Gross Domestic Product at factor cost*					
(millions of current $)	6,076	6,641	7,017	7,536	7,905
% change - Current $	5.9	9.3	5.7	7.4	4.9
Gross Domestic Product at factor cost					
(millions of constant $)	4,677	4,831	5,013	5,085	5,128
% change - Constant $	0.7	3.3	3.8	1.4	0.8
Personal Income*					
(millions of current $)	6,640	7,267	7,867	8,542	9,097
% change - Current $	5.9	9.4	8.3	8.6	6.5
% change - Constant $	2.9	6.4	5.8	4.8	2.5
Retail Trade*					
(millions of current $)	2,407	2,755	3,074	3,286	3,457
% change - Current $	6.8	14.5	11.6	6.9	5.2
% change - Constant $	3.7	11.3	9.0	3.2	1.2
Gross investment					
(millions of current $)	2,576	2,447	2,613	2,661	2,869
% change - Current $	4.7	-5.0	6.8	1.8	7.8
% change - Constant $	2.9	-6.7	6.0	0.8	4.6
Labour Force (000's)					
Annual Average	221	223	231	238	241
% change	0.5	0.9	3.6	3.0	1.2
Employment (000's)					
Annual Average	179	183	193	201	202
% change	2.9	2.2	5.5	4.1	0.7
Unemployment Rate (%)					
Annual Average	19.2	17.9	16.4	15.8	16.0
St. John's Consumer Price Index (1981 = 100)					
Annual Average	131.6	135.4	138.6	143.6	149.3
% change	3.0	2.9	2.4	3.6	4.0

Notes: In some cases, the percentage change may be calculated using unrounded numbers. Some data for 1986 to 1989 is preliminary.

*Data for these indicators are the latest available as of March 7, 1990. As much of the publication was written before this date, these data may differ in some cases from that cited in the text.

f: forecast

Source: Statistics Canada; Newfoundland Statistics Agency and Economic Research and Analysis Division, Cabinet Secretariat.

Appendix 2

AN INVENTORY OF MAJOR PROJECTS

NEWFOUNDLAND AND LABRADOR

Appendix 2

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Airstrip	Clarenville	2.3	1989/1990	Federal funds, with the Provincial Government responsible for maintenance.
Airstrip	Grand Falls	1.9	1989/1990	Federal funds, with the Provincial Government responsible for maintenance.
Airstrip	St. Andrews	1.8	1989/1990	Federal funds, with the Provincial Government responsible for maintenance.
Air Terminal Building - Deer Lake Airport	Deer Lake	5.0	1988/1990	A new air terminal building, complete with a flight service station and technical services facilities, is being constructed with completion scheduled for September 1990. Federal funds.
Apartment Buildings	Various Locations	29.1	1990	Construction of various size apartment structures. These projects are listed under the Private Non-Profit Housing Program of the Newfoundland and Labrador Housing Corporation.
Apron Rehabilitation - Gander International Airport	Gander	4.0	1989/1992	Project involves the rehabilitation of Aprons I and II at the airport. Construction will be phased over a two year period and is scheduled to begin in the 1990 construction season. Federal funds.
Asbestos Processing Plant	Baie Verte	15.0	1988/1990	Construction of a new asbestos processing plant at Baie Verte Mines Inc. that will use an innovative state-of-the-art "wet" milling operation. The project will include the construction of the mill, the purchase of machinery and equipment and the development of a new water supply system. A portion of the cost of this project is funded by a Federal contribution of approximately $7 million through the Atlantic Canada Opportunities Agency (ACOA).
Avalon Cablevision Ltd. - Renovations and Extension	St. John's	1.5	1989/1990	Avalon Cablevision Limited is renovating its current facilities; an additional 6,500 square feet will be added. Private funds.
Brewery Plant Upgrading and Renovation	St. John's	12.0	1989/1991	Labatt Breweries is planning to install new equipment and expand into vacant sections of their present facility. Approximately 65% of the project has been completed. Capital expenditure on machinery and equipment will be about 70% of the total expenditure. Private funds.
Bridge	Mary's Harbour - Lodge Bay	3.0	1990/1991	This project involves the construction of a bridge across the Charles River. Funding for this project is provided under the Comprehensive Labrador Development Agreement, 70% Federal, 30% Provincial funds.
Bridges and Causeways	Various Locations	3.4	1990/1991	Various projects. Provincial funds.
Canadian Centre for Marine Communications	St. John's	16.5	1989/1994	A centre for Marine Communications, to be located at the Newfoundland and Labrador Institute of Fisheries and Marine Technology, is being created to support industry with the development of commercial applications of marine technology. The centre is being funded by ACOA ($7.5 million), the Federal Department of Communications ($1.5 million) and the Marine Institute ($1.1 million). The remaining $6.5 million is expected to be generated by industry/government sponsored projects in the centre's first five years of operation.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Combined Services Building - Stephenville Airport	Stephenville	3.8	1988/1991	The new building will house a garage, trade shops and associated equipment and materials, and the airport's crash fire rescue resources. Preliminary design stage is completed. Federal funds.
Community Health Centre	Roddickton	3.6	1989/1991	Construction of an approximately 1,800 square meter complex will start in the spring of 1990. Provincial funds.
Confederation Building - East Block Renovations	St. John's	33.4	1986/1992	Renovations to existing offices and House of Assembly. Provincial funds.
Courthouse	Gander	2.7	1990/1992	Provincial funds.
Cowan Heights Shopping Centre	St. John's	7.0	1989/1990	Interprovincial Shopping Centres Incorporated is constructing a 56,000 square foot complex. The centre will contain approximately 25 retail outlets. Private funds.
Department of National Defence	Goose Bay	105.9	1987/1994	This is a joint program of the Department of National Defence, Transport Canada and Public Works Canada. Originally, $85.9 million was allocated under this program to upgrade the southside of the airport to a Canadian Forces Base and allow the northside to become a civilian area. This funding included the upgrading of roads, buildings, runways, main operating areas and fuel and water systems. An additional $20 million has been added to the original expenditures to provide for the following projects: $2.5 million to construct an officer's mess by 1990; $2.5 million to refurbish married quarters by 1991; $15 million to rehabilitate the Fuel Farm by 1993.
Development of General Aviation Area - St. John's International Airport	St. John's	3.0	1989/1993	These expenditures are for the expansion of the General Aviation Area including a common-use taxilane, groundside roads, security fencing, stormwater drainage, water distribution and sanitary sewerage and site preparation. The project is in the preliminary design stage. Federal funds.
Development of White Hills Resort	Clarenville	10.0	1988/1990	Projects completed to date include: a day ski lodge, a ski rental shop, a maintenance lodge, a pump house and triple, quad and surface ski lifts. Further site improvements are expected to continue in 1990. The project will receive a $4.2 million contribution from ACOA.
Economic and Regional Development Agreement (ERDA) on Highway Development and the Newfoundland Transportation Initiative Enrichment of ERDA.	Various Locations	286.0	1985/1992	The earlier ERDA agreement provided $186 million by the Federal and Provincial Governments for upgrading of the Trans-Canada Highway, regional trunk and access roads, and for work on the Trans-Labrador Highway. The enrichment of ERDA expenditure consists of an additional $100 million which is a component of the Newfoundland Transportation Initiative, an agreement concerning the closure of the railway in Newfoundland. The additional $100 million will be spent on regional trunk roads and the Trans-Labrador Highway. To date, in excess of $180 million has been spent under the Transportation ERDA. ERDA is cost-shared 62.5% Federal and 37.5% Provincial.

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Enhancements of Offshore Fabrication Capabilities of Marystown Shipyard Limited	Marystown/Cow Head	36.5	1990/1991	A sum of $36.5 million has been approved in principle under the Canada/Newfoundland Offshore Development Fund for an offshore fabrication enhancement program at Marystown Shipyard Limited. Specifically the program is comprised of three activities, including: management training; engineering and design of new facilities; and construction of new facilities. 75% Federal, 25% Provincial funds.
Fall River Plaza	St. John's	7.0	1989/1990	Construction of a 50,000 square foot complex is underway by Interprovincial Shopping Centres Incorporated. The plaza will contain approximately 30 retail outlets. This project is approximately 50% completed. Private funds.
Ferry Terminal	Argentia	4.2	1989/1990	Marine Atlantic is constructing a two-storey terminal building. The expenditure figures include $2.9 million for construction of the building with the remaining $1.3 million for site development. Federal funds.
Fisher Institute - Extension	Corner Brook	8.0	1990/1992	An extension of 15,000 square feet will provide space for new technology and existing programs. Provincial funds.
Fish Plant - Upgrading and Expansion	Makkovik	4.7	1988/1990	Preliminary design and engineering work were completed during fiscal year 1988/1989 with the reconstruction of the existing plant to be completed in 1990. Funded under ERDA for Inshore Fisheries, 41% Federal, 59% Provincial funds.
Fish Plant - Upgrading and Expansion	Nain	2.6	1988/1990	Preliminary design and engineering work were completed in fiscal year 1988/1989. The upgrading and expansion of the existing plant will be completed in 1990. Funded under ERDA for Inshore Fisheries, 41% Federal, 59% Provincial funds.
Fish Processing Plant-Modernization Program	Valleyfield	5.2	1989/1992	Beothic Fish Processors Limited will make structural changes to the plant and purchase $2.4 million of machinery and equipment to modernize the facility. Project will receive a $2.6 million contribution from ACOA.
Fleet Dock Reconstruction	Argentia	8.6	1989/1990	The project, which is 23% completed, includes the reconstruction of 305 meters of the existing Fleet Dock. Construction commenced August 1989 and is scheduled to be completed by November 1990. Federal funds.
General Services Building - St. John's International Airport	St. John's	5.6	1988/1990	This project will provide a common building to house marine, aviation and weather forecasting services. These expenditures are part of the Airport Master Plan. The Airport Master Plan was formulated in 1984 and is expected to continue until the year 2000. Plans call for the building of a new air terminal building. Total cost of the Airport Master Plan is estimated at $100 million.
German AirForce - Facilities Construction and Upgrading	Goose Bay	46.5	1987/1990	Expenditures include the construction of the German Air Force Hanger 5 at a cost of $35 million, construction of pilot accommodations at a cost of $8 million, renovations of Hangers 4 and 6 and renovation of B478 Social Club and B273 operational workshops.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Golf Course	St. John's	2.4	1989/1991	Construction of an 18 hole golf course by the Thomas Development Corporation will be aided by ACOA with funding in the order of $1,150,000 and an interest buy-down valued at $297,000. The golf course is approximately 45% completed and is expected to be fully functional by the summer of 1991.
Governor's Park	Salmonier	5.0	1988/1990	Construction of a 40 room hotel, 10 cabins, a trailer park and recreational facilities are expected to be completed in 1990. Provincial, Federal and private funds.
Gros Morne National Park - Park Improvements	Great Northern Peninsula	4.0	1990/1991	Work includes the completion of Lomond Road and the Recreation Complex. New capital expenditures include the construction of a boat tour facility at Trout River, the construction of several trailer dumping stations and the continuation of the Theme Plan Development Program. Other capital expenditures include the development of ski and hiking trails, campground enhancement and upgrading existing facilities.
Groundside Vehicle Parking and Roadway System - Deer Lake Airport	Deer Lake	1.6	1988/1990	Construction will result in expansion and modification of the existing groundside terminal area access roadway system and associated vehicle parking areas. These activities will compliment the construction of the new air terminal building. This project is scheduled for completion by September 1990. Federal funds.
Health Sciences Centre - Extension	St. John's	6.9	1990/1992	Extension will consist of approximately 47,500 square feet. Funding provided by the Provincial Government (78%) and the Newfoundland Cancer Treatment and Research Foundation (22%).
Hibernia Offshore Oil Field Development - Statement of Principles	Various Locations	8,500.0	1990/2013	The expenditures listed for this development include the construction and installation of production and storage facilities, subsea equipment, shuttle tankers and development drilling. The capital cost breakdown is as follows: pre-production construction phase $5.1 billion (extending from 1990/1996); production phase $3.4 billion (extending from 1996/2013). Expenditures are expected to start in the fourth quarter of 1990 and production is expected to begin in 1996. The construction site for the Gravity Based Structure (GBS) will now be Great Mosquito Cove, Trinity Bay. The work at the Trinity Bay site will include graving dock construction, GBS construction, module assembly and hook-up and other fabrication and construction activities. The Government of Canada will contribute 25 percent of the pre-production capital costs to a maximum of $1 billion and guarantee loans for 40 percent of the costs to a maximum of $1.6 billion. The Government of Newfoundland and Labrador will remove the retail sales tax on project capital costs and will provide $11 million to the project for specific engineering activities in the Province.
Highway Improvement and Construction	Various Locations	19.1	1990/1991	A variety of projects undertaken by the Province. Provincial funds.
Hotel	Clarenville	5.0	1988/1990	Terra Inns Limited is constructing a hotel which will contain 65 rooms, dining room, lounge, banquet facility and outdoor pool. Project will be constructed with the help of a $1.6 million contribution from ACOA.

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Hotel	Rocky Harbour	2.7	1990	St. Jude Inc. is constructing a 40 unit hotel including suites, dining rooms, meeting rooms and lounge facilities. Private funds.
Hotel	Stephenville	4.7	1990	Construction of a 60 unit hotel by St. Jude Inc. will include suites, dining rooms, meeting rooms and lounge facilities. Private funds.
Hotel-Expansion and Renovation	Gander	3.1	1989/1990	Construction of 48 rooms, an indoor pool and health club, as well as exterior renovations at Hotel Gander. The project will receive a $930,000 contribution from ACOA.
Hotel-Expansion and Renovation	Gander	2.7	1989/1990	Construction of 31 housekeeping units, a fitness centre and other facilities, as well as reconstruction of the dining room and lobby, will be carried out at Sinbad's Hotel. The project will receive a $720,000 contribution from ACOA.
HUB Building - Extension	St. John's	1.0	1990/1991	Provincial funds.
Industrial Complex	Pasadena	1.0	1989/1990	The complex, which is being constructed by Dagle Lumber, will contain warehouse and office space, as well as a window and door manufacturing facility. Approximately 38% of total capital expenditures will be on equipment. Private funds.
Industrial Infrastructure Planning	Various Locations	1.3	1987/1991	Pre-engineering and design work related to the possible Hibernia related development sites. Funding provided under the Canada/Newfoundland Offshore Development Fund, 75% Federal, 25% Provincial funds.
Industrial Park	Clarenville	3.0	1990	This project will involve various site preparation activities including construction and paving of roads, as well as the installation of water and sewer services.
Journey's End Hotel	St. John's	12.0	1989/1990	Journey's End Corporation is constructing a 73,000 square foot hotel. The complex will include 164 rooms, restaurant and a dry-cleaning service. Private funds.
Labrador Airport Programs	Labrador Communities	4.8	1990/1995	General restoration work. Federal funds.
Lightstation Standardization	Various Locations	4.5	1990	The Canadian Coast Guard, Newfoundland Region, administers and operates 56 lightstations along the coast of Newfoundland and Labrador. Eleven of these stations are to undergo upgrading and improvements to structures and equipment to prepare them for remote monitoring capability. Work to be carried out consists of the renovation of a number of existing structures, the demolition of some structures, and construction of new structures and installation of equipment. Federal funds.
Main Terminal Expansion Program	St. John's	1.5	1990	St. John's Port Corporation will develop 63,000 square feet of land that will be used as storage area for containers. Expenditures include asphalting and fencing of the storage site. Federal funds.
Mall Expansion	Corner Brook	5.0	1989/1990	Blue Chip Investment is expanding Corner Brook Plaza by 80,000 square feet. Private funds.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Manufacturing Plant	**Paradise**	16.3	1989/1990	Acan Windows Incorporated will construct a 125,000 square foot plant for manufacturing solid vinyl windows and patio doors, primarily for markets in Ontario, Quebec and the United States. Of the $16.3 million estimated capital cost, approximately $9.7 million will be spent on equipment and machinery. This project will receive financial assistance of approximately $5.3 million from ACOA.
Manufacturing Plant - Renovations	**Clarenville**	1.0	1990/1991	Renovations of Newfoundland Hardwoods Ltd. plant is expected to begin in 1990. Construction activity will consist of a new office building, a new garage and replacement of the employees' lunchroom. Private funds.
Marine Facilities - Repair and Maintenance Projects	**Various Locations**	3.5	1990/1991	These projects will involve the repair and maintenance of various marine facilities such as sheds, wharves, breakwaters and minor redredging. Federal funds.
Marine Service Centre Program	**Various Locations**	17.0	1988/1992	Improvements to some marine service centres have already been made through acquisitions of heavy equipment. Improvements to others will continue under the program, while new marine service centres will be constructed at various ports in the Province. Funded under ERDA for Inshore Fisheries, 55% Federal, 45% Provincial funds.
Medical Clinic	**Hopedale**	1.0	1990/1991	Funding for this project is provided under the Comprehensive Labrador Development Agreement. This agreement provides for the construction of a total of three medical clinics; two others are planned for Davis Inlet and Nain. 70% Federal, 30% Provincial funds.
Memorial United Church Complex	**Grand Falls**	2.0	1989/1990	The Memorial United Church Congregation is constructing a 14,000 square foot multi-purpose centre. The complex, which is 10% completed, will include a sanctuary, a Christian Education centre and office space. Private funds.
Memorial University of Newfoundland - Arts and Administration Building Extension	**St. John's**	9.0	1990/1993	Extension will consist of approximately 50,000 square feet. Provincial and University funds.
Memorial University of Newfoundland - Centre for Earth Resources Research	**St. John's**	27.1	1987/1990	The 135,000 square foot building (classrooms and laboratory) will house the Earth Science Resource Centre at Memorial University. To date, this project is 85% completed. Funding for the project is provided under the Canada/Newfoundland Offshore Development Fund, 75% Federal, 25% Provincial funds.
Memorial University of Newfoundland - Centre for Offshore and Remote Medicine and Telemedicine	**St. John's**	2.8	1987/1990	This project involves the construction of a new facility on the campus of Memorial University which will contain a hyperbaric medicine facility and other offshore related medical equipment. Funding for the project is provided under the Canada/Newfoundland Offshore Development Fund, 75% Federal, 25% Provincial funds.
Memorial University of Newfoundland - Small Animal Care Facility	**St. John's**	5.0	1990/1993	An approximately 20,000 square foot facility will be constructed on three levels including some space for biochemistry research. Provincial and University funds.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Mill Improvement Projects	Grand Falls	32.9	1989/1993	Abitibi Price Grand Falls will make a variety of capital expenditures at the mill designed to render environmental improvements and increase mill efficiency. The installation of a Primary Effluent Clarifier at a cost of $10.1 million has been approved, to be completed in 1991. The following projects are budgeted: (1) Secondary Effluent Treatment, $12.1 million, to be completed by 1993; (2) Boiler House Emission Control, $2.7 million, to be completed by 1991; (3) Rebuilding of Thermo Mechanical Pulp (TMP) lines, $8.0 million, to be completed by 1993.
Mill Improvement Projects	Stephenville	5.0	1990/1992	Abitibi Price Stephenville will make capital expenditures at the mill that will render environmental improvements and increase mill efficiency. The following projects are approved: (1) Installation of a Winder Drive, $1.5 million, to be completed in 1990; (2) Effluent Treatment, $1.5 million, to be completed in 1990. The Company is budgeting for installation of a Medium Consistency Bleaching system, $2.0 million, to be completed by 1992.
National Research Council's Institute for Marine Dynamics - Wave Generating System	St. John's	10.6	1987/1990	Construction and installation of a wave generator at the National Research Council's Institute for Marine Dynamics. The National Research Council committed $7.07 million for the project with the remaining $3.5 million funded through the Canada/Newfoundland Offshore Development Fund.
Newfoundland and Labrador Housing Corporation - Housing and Development	Various Locations	98.8	1990/1991	These expenditures relate to the Corporation's capital expenditure activities of which many programs are cost-shared on a 75/25 Federal/Provincial basis with NLHC's Federal counterpart Canada Mortgage and Housing Corporation (CMHC). The budget includes spending for the Rural and Native Housing Program, the Non-Profit Housing Program, the Residential Rehabilitation Assistance Program (RRAP), Residential Land Assemblies, Industrial Land Development, modernization of the Corporation's rental portfolio, and the construction of housing for clients with special needs.
Newfoundland and Labrador Hydro-Capital Expenditures	Various Locations	97.0	1990	Includes various transmission and generation related programs, the completion of the energy control centre of Hydro's new head office building in St. John's and the completion of a staff house/mess hall recreation complex at Churchill Falls.
Newfoundland and Labrador Institute of Fisheries and Marine Technology - Marine Offshore Simulator Training Centre	St. John's	12.8	1987/1991	Centre will include a full-mission ship's bridge simulator as well as a ballast control simulator. Funding for the project is provided under the Canada/Newfoundland Offshore Development Fund, 75% Federal, 25% Provincial funds.
Newfoundland and Labrador Youth Centre	Whitbourne	13.0	1988/1992	The centre will be constructed in two phases. Phase I includes the construction of an administrative core building and housing facilities for 30 youths. Phase II consists of the construction of housing facilities for 50 youths. Provincial funds.
Newfoundland Light & Power Co. Limited - Capital Expenditures	Various Locations	68.0	1990	Includes improvements to computer systems and upgrading of transmission and distribution systems.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Newfoundland Telephone - Capital Expenditure Program	Various Locations	93.8	1990	These expenditures will occur at a number of exchange and radio locations, providing the telephone sets, outside plant cable, exchange and circuit equipment for local and long distance calling throughout the Province. Expenditures will also provide for the modernization of the telephone network and the introduction of new business and residence services. Approximately 70% will be spent on machinery, equipment and supplier engineering and installation. The remaining 30% will be spent on engineering and installation provided by Newfoundland Telephone.
Newfoundland Transportation Initiative	Various Locations	648.1	1989/2003	These expenditures are components of the Newfoundland Transportation Initiative, an agreement concerning the closure of the railway in Newfoundland. Expenditures designed to upgrade and improve the Province's transportation infrastructure include the following: (1) $405 million to be spent between 1990 and 2003 on a major upgrading of the Trans-Canada Highway; (2) $235 million to be spent on regional trunk roads over the period 1991 to 2003; (3) $8.1 million to be spent for port improvements to St. John's and Argentia. Federal funds.
Offshore Survival Centre	Little Soldiers Pond, Foxtrap	5.0	1987/1991	This project includes the development of a fire ground and complex, with training facilities. Funding for the project is provided under the Canada/Newfoundland Offshore Development Fund, 75% Federal, 25% Provincial funds.
Paper Mill - Upgrading Facilities for Pollution Control	Corner Brook	40.0	1989/1991	The Corner Brook Pulp and Paper Mill will install a new bark burning boiler and carry out certain other environmental measures in order to meet Federal and Provincial anti-pollution requirements. Approximately 75% of the estimated capital cost will be spent on machinery and equipment. Private funds.
Pearlgate Shopping Centre	Mount Pearl	75.0	1990/1992	Toulon Development Corporation will construct a 500,000 square foot shopping complex on 41 acres of land. The complex will include: major department stores; a mix of apparel, accessory, food, hardware and home furnishing stores; and activity and entertainment spaces (ie., mini golf course). Private funds.
Petroleum Technology Training Program	Various Locations	21.1	1987/1991	Upgrading and/or establishment of Provincial post-secondary technology training facilities and programs related to the offshore petroleum industry. Funding for the project is provided under the Canada/Newfoundland Offshore Development Fund, 75% Federal, 25% Provincial funds.
Printing and Publishing Plant - Expansion	Grand Falls	1.0	1989/1990	Robinson-Blackmore Printing and Publishing Limited will expand its present facilities by approximately 6,000 square feet. The project will receive a six percent interest buy-down from ACOA.
Protein Hydrolysate Plant	Marystown	13.5	1990/1991	Fishery Products International Limited, through a joint venture with a French company, will establish a state-of-the-art fish meal plant adjacent to its fresh fish processing plant in Mooring Cove. The plant will produce a high quality fish protein concentrate for feed in agriculture and aquaculture.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Pulp and Paper Mill - Modernization Program	Corner Brook	300.0	1985/1990	Involves the installation of new production equipment and improved production processes at Corner Brook Pulp and Paper Ltd. The Federal and Provincial governments will contribute $45.6 million of the total cost, with the balance paid by the Company. As of December 31, 1989, approximately $223 million had been spent on the program.
Pulp and Paper Mill - Paper Machine Conversion	Corner Brook	19.5	1990/1993	Corner Brook Pulp and Paper Ltd. will convert the No. 4 newsprint machine to produce specialty grade paper, the type which is used for advertising inserts in newspapers. The Company will invest $13.6 million, while ACOA will contribute a further $5.8 million. An additional 25 jobs will be created at the mill as a result of the conversion.
Quidi Vidi/Rennies River Development	St. John's	5.0	1985/1995	The implementation of the Quidi Vidi/Rennies River Development Foundation's 10 year Development Plan continues on schedule. Construction of the Newfoundland Freshwater Resource Centre began in 1989 and the centre should be completed in early 1990. Linear Park development along Rennie's River and around the Quidi Vidi Lake will continue and plans include a well defined training program. Federal and Municipal funding has been committed and provincial funding is anticipated by the Foundation, as well as corporate and private fundraising.
Replacement of Curtain Walls - Gander International Airport	Gander	3.9	1988/1991	Approximately 945 linear meters of the original air terminal building curtain/panel wall will be replaced with new panel finishing that will include insulation, required glazing, the removal of sprayed-on asbestos insulation from structural beams, and radiation heating system modifications. The preliminary design stage has been completed to date. Federal funds.
Road and Bridge Rehabilitation	Various Locations	7.5	1990/1991	Various projects. Provincial funds.
Roadrunner Truck Stop & Recreational Complex	Thunder Brook	5.0	1990/1993	This project will include the construction of a truck stop and a recreational complex on 45 acres of land located seven miles west of Grand Falls. The truck stop will include accommodations, restaurant, lounge and a truck repair facility. The recreational complex will include efficiency unit cottages; a children's driving safety village; tent sites; nature, ski-doo and skiing trails and another restaurant. The facility will be functional year-round when completed.
Royal Air Force - Facilities Upgrading	Goose Bay	3.4	1987/1990	Expenditures include ramp repairs, renovation of B1071 explosive storage area, extension of engine bay Hangar 8, resurfacing of various areas and construction of a fire escape for Hangar 8.
Royal Canadian Mounted Police - Capital Construction Program	Various Locations	6.0	1990/1991	Aside from completing a large number of projects from the 1989/1990 program, these expenditures relate to some of the projects which the RCMP intends to start in this fiscal year. This program consists of expenditures on the Happy Valley/Goose Bay and Hopedale detachments; Happy Valley/Goose Bay, Ferryland and Fogo married quarters and a radio facility for St. John's.
Royal Canadian Mounted Police - New Headquarters Building	St. John's	27.0	1990/1993	Building will contain approximately 14,000 square meters of space. Federal funds.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Royal Netherlands Air Force - Facilities Upgrading	Goose Bay	2.3	1987/1990	Expenditures include renovations of Barrack Block 311 and construction of commanding officer's residence. The commanding officer's residence is now completed.
Royal Newfoundland Constabulary Building - Extension	St. John's	1.1	1990/1992	Provincial funds.
Samaritan Place	Gander	32.0	1989/1992	Complex is being designed for retired couples and will be dedicated to the memory of the soldiers of the 101st Airborne Division of the United States Army. Complex will contain 210 apartments, a 50 bed convalescent care unit and sports facilities. Funded by Gander-Masonic Memorial Complex Inc. and by private fund raising activity.
School Construction	Various Locations	27.0	1990/1991	Provincial funds.
Shopping Centre/Office Space - Renovations and Expansion	St. John's	6.0	1989/1990	Ayre's Limited is presently undergoing renovations and expansion to its current facilities in Churchill Square. An additional two floors will be added, with the top floor allocated as office space and the remaining floors as retail outlets. Private funds.
Shopping Plaza	St. John's	2.5	1989/1990	Canadian Shopping Centres is constructing three buildings, each containing 14,000 square feet, to be used as retail outlets. Private funds.
Sir Humphrey Gilbert Building	St. John's	11.0	1989/1991	Restoration of both the exterior and interior of the building. Also, new mechanical and electrical systems will be installed. Federal funds.
Small Craft Harbour Revitalization Program	Various Locations	35.0	1987/1990	Construction of wharves, breakwaters and slipways throughout the Province. Approximately $2 million will be spent in 1990 on the completion of breakwaters in Lower Island Cove and Grates Cove, as well as Baine Harbour slipway construction. Federal funds.
St. Christopher's Resort	Terra Nova National Park	9.4	1989/1990	Construction of a year-round tourist facility will include an 80 room hotel with recreation facilities, restaurant and convention areas. Also, there will be an additional nine holes added to Twin Rivers Golf Course. This project is approximately 50% completed. Private and public funds including a contribution of $3.9 million from ACOA.
St. John's City Hall Annex	St. John's	3.5	1988/1990	The new 25,000 square foot facility will house the City Library, the Department of Building and Development, the City Solicitor's office and tourism and personnel offices. Municipal funds.
Supermarket	Grand Bank	2.3	1989/1990	The Sobey's Group will construct an 18,200 square foot supermarket. Private funds.
Supermarket	Grand Falls	3.5	1990	The Sobey's Group will construct a 30,000 square foot supermarket. Private funds.
United States Air Force-Facilities	Goose Bay	39.8	1988/1991	Expenditures include ramp and taxiway repairs at a cost of $35 million, refurbishing of the hydrant system on ramps 3A/4A, roof replacement on various buildings, as well as replacement of the Mole Hole backup power.
Upgrading of Water Distribution System - Gander International Airport	Gander	1.7	1988/1992	This project includes upgrading of the airport water distribution system to provide an adequate and reliable water supply. The preliminary design stage has been completed. Federal funds.

Appendix 2 (cont'd.)

AN INVENTORY OF MAJOR PROJECTS IN NEWFOUNDLAND AND LABRADOR

Project	Location	Estimated Capital Cost ($ Millions)	Start/End Date	Comments
Water and Sewer Disposal Infrastructure	Coastal Labrador	7.0	1990/1991	Expenditures for this project are provided under the Comprehensive Labrador Development Agreement. A total of $18.1 million is allocated to water and sewer projects on the southern coast of Labrador over the five year agreement. 70% Federal, 30% Provincial funds.
Water and Sewer Projects	Various Locations	7.2	1990/1991	Proposals for this fiscal year include the expenditure of approximately $7.2 million among various Labrador communities for the purpose of improving water and sewer systems. Expenditures during 1990/1991 are part of a five year agreement totalling about $13.3 million covering the period 1988/1989 - 1993/1994. Projects are funded through the Native People's Agreement and are cost shared 66% Federal and 34% Provincial.
Water, Sewer and Paving Projects	Various Locations	55.0	1990/1991	Various projects. Provincial and Municipal funding.
Wharf Reconstruction	Charlottetown, Labrador	2.0	1989/1990	Reconstruction commenced August 1989 and is scheduled to be completed by August 1990. This project is 65% completed. Federal funds.
Wharf Reconstruction	Grand Bruit	1.7	1989/1990	Reconstruction commenced September 1989 and is scheduled to be completed by July 1990. This project is 15% completed. Federal funds.
Wharf Reconstruction	Rigolet	2.5	1990/1991	Project includes demolition of existing public wharf and construction of a new wharf. This project is scheduled to commence July 1990 and to be completed by September 1991. Federal funds.